



भारत का राजपत्र

The Gazette of India

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 14] नई दिल्ली, शनिवार, अप्रैल 4, 1987 (चैत्र 14, 1909)

No. 14] NEW DELHI, SATURDAY, APRIL 4, 1987 (CHAITRA 14, 1909)

इस भाग से भिन्न पृष्ठ संख्या दी जाती है जिससे कि वह अलग संकलन के रूप में रखा जा सके।

(Separate paging is given to this Part in order that it may be filed as a separate compilation)

भाग III—खण्ड 2

[PART III—SECTION 2]

पटेंट कार्यालय द्वारा जारी को गई पटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस
[Notifications and Notices issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE
PATENTS AND DESIGNS
Calcutta, the 4th April 1987

ADDRESS AND JURISDICTION OF OFFICES OF THE PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial jurisdiction on a zonal basis as shown below:—

Patent Office Branch,
Todi Estates, 3rd Floor,
Lower Parel (West),
Bombay-400 013.

The States of Gujarat, Maharashtra, and Madhya Pradesh, and the Union Territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

Telegraphic address "PATOFFICE".

Patent Office Branch,
Unit No. 401 to 405, 3rd Floor,
Municipal Market Building,
Saraswati Marg, Karol Bagh,
New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

Telegraphic address "PATENTOFIC".

Patent Office Branch,
61, Wallajah Road,
Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, and the Union Territories of Pondicherry, Laccadive, Minicoy and Aminidivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office, (Head Office),
214, Acharya Jagadish Bose Road,
Calcutta-700 017.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

Fees :—The fees may either be paid in cash or may be sent by Money Order or Postal Order, payable to the Controller at the appropriate Offices or by bank draft or cheque, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

CORRIGENDUM

In the Gazette of India, Part III, Section 2, dated 31st August, 1985 under the heading "COMPLETE SPECIFICATION ACCEPTED".

At page 662, Column 1 against No. 156551 please insert "Anti dated to 10th August, 1981" above divisional to Patent Application No. 151703.

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE 214, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-700017

The dates shown in crescent brackets are the dates claimed under Section 135 of the Act.

The 26th February, 1987

147/Cal/87. Siemens Aktiengesellschaft. Co-ordination system of many co-acting control devices over a bus-system.

The 27th February, 1987

148/Cal/87. Satya Ranjan Panja. Protective Fly Roof.

149/Cal/87. Satya Ranjan Panja. Adjack Operation RCPC mechanically moulded manhole door.

150/Cal/87. Institut National De La Recherche Agronomique (INRA), Institut Pasteur and Commissariat A L'Energie Atomique (CEA). Molecular probes for DNA specific for the male genome of ruminants, especially of the subfamily of the bovines and particularly of the genus bos, the process for their preparation and the use of these probes for determining the sex of ruminant embryos and fetuses and for checking the presence of the Y chromosome in a population of spermatozoa and separating the said population into two groups, respectively comprising the Y chromosome and the X chromosome, for their application to artificial insemination.

151/Cal/87. (1) Vsesojuzny Nauchno-Issledovatel'sky I Proektny Institut Aljuminievoi, Mgnievoi I Elektrodnoi Promyshlennosti; (2) Spetsialnoe Konstruktorskoe Buro Magnitnoi Gidrodinamiki Instituta Fiziki Akademii Nauk Latviiiskoi SSR.

152/Cal/87. NGK Insulators, Ltd. Pollution-proof Insulator.

153/Cal/87. Energy Conversion Devices, Inc. An Electronic System. [Divisional dated 3rd January, 1984].

154/Cal/87. Energy Conversion Devices, Inc. A flat panel display and method of making same. [Divisional dated 3rd January, 1984].

The 2nd March, 1987

155/Cal/87. TLV CO, Ltd. Steam trap operation judging device.

156/Cal/87. VEB Kombinat Feinmechanische Werke Halle. Arrangement for the production of CO₂-laser impulse of higher capacity.

157/Cal/87. VEB Kombinat Feinmechanische Werke Halle. Arrangement for internal intensity-modulation of selective wave-length and production of impulsive radiation from Highly effective CO₂-lasers.

158/Cal/87. OKI Electric Industry Co. Ltd. Analog-Digital Hybrid Integrated Circuit.

159/Cal/87. Richard J Schafer. Stepping Staff.

The 3rd March, 1987

160/Cal/87. M/s. R. B. Chemicals. Jute/Mesta processing composition.

161/Cal/87. Westinghouse Electric Corporation. Improvements in or relating to apparatus for ultrasonically inspecting a large shaft from a liquid-filled bore.

162/Cal/87. Norddeutsche Affinerie Aktiengesellschaft. Process of producing copper hydroxide.

163/Cal/87. Cegedur Societe De Transformation De L' Aluminium Pechiney. Mould permitting regulation of the level at which it is in contact with the free surface of the metal in a vertical casting operation.

164/Cal/87. Ianxide Technology Company, LP. Process for preparing self-supporting bodies and products made thereby.

The 4th March, 1987

165/Cal/87. Ecrox Corporation. Document Deskewing system. [Divisional dated 29th July, 1983].

166/Cal/87. Trutzschler GmbH & Co. Kg. The device at a carding machine, carding engine or similar things for blending the card sliver or spunbonded tissue.

167/Cal/87. Georg Fischer Aktiengesellschaft. Disk wheel for a vehicle.

168/Cal/87. Combustion Engineering, Inc. Low excess air tangential firing system.

169/Cal/87. Tideland Signal Corporation. Electrical continuity sensing circuit.

170/Cal/87. Kone Elevator GmbH. Procedure for programming a point matrix display decoder.

APPLICATION FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, MUNICIPAL MARKET BUILDING, 3RD FLOOR, KAROL BAGH, NEW DELHI-110 005

The 12th January, 1987

20/Del/87. Rohm And Hass Company. "Microplastic structures, process for forming such structures, and photomask suitable for use in such process".

21/Del/87. Rohm And Hass Company. "Negative photoresist compositions and processes for preparing thermally stable, negative images using them".

The 13th January, 1987

22/Del/87. The Lubrizol Corporation. "Lubricant composition containing transition metals for viscosity control".

23/Del/87. Imperial Chemical Industries. "Compositions for surface treatment, polymers therefor, and method of surface treatment". (Convention date 22nd January, 1986, and 21st April, 1986, U.K.).

24/Del/87. Pozel SA. "A process for the manufacture of a heating element".

The 14th January, 1987

25/Del/87. George R. Geller. "Method and apparatus for modifying fabrics to produce varied effects".

The 15th January, 1987

26/Del/87. Bayer Aktiengesellschaft. "Process for the preparation of 4-Nitrodiphenylamines".

27/Del/87. The Lubrizol Corporation. "Phosphorus containing metal salt/olefin compositions and reaction products of same with active sulfur". [Divisional date 31st March, 1984].

28/Del/87. The Lubrizol Corporation, "Phosphorus containing metal salt/olefin compositions and reaction products of same with active sulfur". (Divisional date 31st March, 1984).

The 16th January, 1987

29/Del/87. Jagdeep Jain, "Improvements in or relating to rubber or plastic bulb fitted with a non-returnable valve for use in blood pressure measuring instruments or other medical instruments".

30/Del/87. The Engineering and Technical Services Ltd., "A method and apparatus for clarification and filtration of sugar cane syrup".

31/Del/87. Hari Krishan, "A stirling engine".

32/Del/87. SRF Nippondenso Limited, "A starter motor".

33/Del/87. PPG Industries, Inc., "Method and apparatus for liquefying thermally fusible material such as glass".

APPLICATION FOR PATENTS FILING AT FOR PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002

The 16th February, 1987

101/Mas/87. HENKEL KOMMANDITGESELLSCHAFT AUF AKTIEN, "A process for the production of solid alkali metal salts of alpha-sulfofatty acid alkyl esters".

102/Mas/87. TSUNG-HSIEN KUO, "Improvement of Refuse Incineration system".

103/Mas/87. JULIUS HARTAI, Method and apparatus for Non-Destructive Materials Testing and Magneto-structural Materials Investigations.

104/Mas/87. RANK TAYLOR HOBSON LIMITED, Vibration Isolation Means. (February 25th, 1986, United Kingdom).

The 17th February, 1987

105/Mas/87. INLAND STEEL COMPANY, Fume Control in Strand Casting of Free Machining Steel.

106/Mas/87. DSM RESINS B.V., Sheet Moulding Compound and a Top Coat for it.

107/Mas/87. CATERPILLAR INC., "Control System for Independent Control of Fluid Actuated Devices". (June 26th, Canada).

The 18th February, 1987

108/Mas/87. LUCAS INDUSTRIES LTD-IC LIMITED COMPANY, "Improvements Relating to Brake Actuators".

(February 28th, 1986, United Kingdom).

109/Mas/87. TAKEDA CHEMICAL INDUSTRIES LIMITED, Carbocyclic Purine Nucleosides, Their Production and use.

110/Mas/87. PAUL COUWENBERGS, Roll Block and Roll-Way Assembled from Roll Blocks.

111/Mas/87. SOCIETE DES PRODUITS NESTLE S.A., "Amino Sugar Carbonating Agents and Their Preparation".

The 19th February, 1987

112/Mas/87. TCS CONTAINERS PTY. LTD., Cargo Containers. (February 21st, 1986, Australia).

113/Mas/87. PALITEX PROJECT-COMPANY GMBH, Thread Brake Mechanism for a Spindle Assembly of a Thread Processing Machine.

The 20th February, 1987

114/Mas/87. LUCAS INDUSTRIES PUBLIC LIMITED COMPANY, "Master Cylinder". (March 1st 1986, G.B.).

115/Mas/87. LUCAS INDUSTRIES PUBLIC LIMITED COMPANY, "Improvements in Self Energising Disc Brakes" (March 1st 1986, U.K.)

116/Mas/87. UNION CARBIDE CORPORATION, Carboxyl-Terminated Lactone Acrylates.

117/Mas/87. UNION CARBIDE CORPORATION, "Novel Polymers and Crosslinked Compositions made Therefrom".

ALTERATION OF DATE

159169 (1376/Cal/83) Ante dated to 5th February, 1980.

159175 (790/Cal/84) Ante dated to 25th June, 1982.

159176 (17/Cal/85) Ante dated to 5th February, 1982.

159177 (77/Cal/85) Ante dated to 10th December, 1982.

159178 (307/Cal/85) Ante dated to 3rd May, 1984.

COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of Patents on any of the applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed along with the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

"The classifications given below in respect of each specification are according to Indian Classification and International Classification."

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

CLASS : 98-G 159149

Int. Cl. : F 28 f 3/00.

HEAT TRANSFER ELEMENT ASSEMBLY.

Applicant : THE AIR PREHEATER COMPANY, INC., OF ANDOVER ROAD, WELLSVILLE, NEW YORK, U. S. A.

Inventors : 1. HERMANN EDWARD KURSCHNER, 2. WILLIAM FRANCIS HARDER.

Application No. 455/Cal/82 filed April 23, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

5 Claims

A heat transfer element assembly for a heat exchanger comprising a plurality of first heat absorbent plates and a plurality of second heat absorbent plates stacked alternately in spaced relationship thereby providing a plurality of passageways between adjacent first and second plates for flowing a heat exchange fluid therebetween; and spacers maintained a predetermined distance between adjacent plates, said spacers comprising bilobed folds in said first and second plates, the folds in said first plates having their first lobe projecting outwardly from said first plate in a first direction and their second lobe projecting outwardly from said first plate in a second direction opposite to the first direction, and the folds in said second plates having their first lobe projecting outwardly from said second plate in the second direction and their second lobe projecting outwardly from said second plate in the first direction, the folds in said second plates thereby having a pitch opposite to the pitch of the folds in said first plate so as to preclude adjacent first and second plates from nesting.

Compl. specn. 10 pages.

Drg. 2 sheets

CLASS : 172-D & s

159150

Int. Cl. : D 01 h 7/74.

METHOD OF PRODUCING A THREAD ON AN OPEN-END SPINNING MACHINE AND AN OPEN-END SPINNING MACHINE FOR CARRYING OUT THE METHOD.

Applicant : SCHUBERT & SALZER MASCHINENFABRIK AKTIENGESELLSCHAFT, OF FRIEDRICH-EBERT-STRASSE 84, 8070, INGOLSTADT, WEST GERMANY.

Inventors : 1. KURT LOVAS, 2. FRANZ DEISINGER.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

17 Claims

A method of producing a thread on an open-end spinning machine comprising a plurality of spinning devices, each of which contains a spinning cell, which operates at an underpressure and comprises a fibre-collecting surface, and a bobbin device, characterised in that, when the open-end spinning machine is stopped, the spinning devices are all brought to a standstill together—although the underpressure is maintained—the thread ends produced by interrupting the spinning process are prepared for joining one after the other at each spinning station and brought into a thread joining position at the spinning device—whereupon the underpressure is also discontinued—and, when the open-end spinning machine is started, the threads disposed in the thread joining position are jointly fed in a known manner to the fibre-collecting surfaces at all the spinning devices following the introduction of the underpressure.

Compl. specn. 38 pages.

Drg. 2 sheets

CLASS : 32-E

159151

Int. Cl. : C 08 g 33/00.

A PROCESS FOR THE PRODUCTION OF AN ALKY-LAMINOPHOSPHONIC CHELATING RESIN.

Applicant : DUOLITE INTERNATIONAL S.A., AT 107, RUE EDITH CAVELL, 94400 VITRY-SUR-SEINE, FRANCE.

Inventors : 1. MICHEL ARMAND GILBERT CORNETTE, 2. JACK CARBONEL OFRUE JULES GUESDE, 3. JACQUES EDOUARD AUGUSTE FRANC, 4. PAUL DESIRE ANATOLE GRAMMONT.

Application No. 229/Cal/83 filed February 24, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

14 Claims

A process for the production of an alkylamino-phosphonic chelating resin which process comprises :

(a) selecting in a manner as herein described beads of a macroporous reticulated vinylaromatic copolymer which beads have a porosity from 700 mm³/g to 100 mm³/g, a volume of swelling in toluene factor of from 1.65 to 1.9, and a size in the range of 0.3 to 0.5 mm;

(b) (i) chloromethylating in a manner as herein described the copolymer beads to introduce a desired level of chlorine,

(ii) aminating the chlorinated beads to form chloraminated beads,

(iii) hydrolyzing the chloraminated beads under moderate conditions with dilute acid, and

(iv) alkylphosphonating for a time and temperature that introduce on more energy into the reaction than 90°C for three hours the hydrolyzed beads in such a manner as does not produce secondary cross-linking the copolymer.

(c) the said chloromethylation, amination hydrolysis and alkylphosphonation being carried out under such conditions and for a duration such that the alkylaminophosphonic chelating resin thereby produced has an apparent density of 0.35 to 0.425 g/ml, a granulometry smaller than 0.8 mm, a water retention of 50 to 60 percent in the acid form, a porosity of 800 to 1100 mm³/g, a total theoretical capacity for the fixation of calcium ions of not greater than 31 g/l of resin in the sodium form and an osmotic resistance such that more than 90 per cent of the beads are intact after 30 shocks.

Compl. specn. 28 pages.

Drg. Nil

CLASS : 27-I

159152

Int. Cl. : E 04 d 19/00.

A FIRE-PROTECTIVE CLOSURE OR SEAL FOR AN OPENING IN A BUILDING.

Applicant & Inventor : THEO SCHRODERS, OF GERMARD-WILTER-STRASSE 7 5140 ERKELNZ, FEDERAL REPUBLIC OF GERMANY.

Application No. 359/Cal/84 filed May 25, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

7 Claims

A fire-protective closure or seal for an opening in a building, comprising a flat or shallow box which encloses a stiffening frame and an insulating material core or insert, and which is formed by two metal sheets which are connected together by way of bent edge strips characterised in that the stiffening frame consists of gypsum profiles which are connected to one another and that the gypsum profiles are composed of gypsum strips which are rectangular in cross-section and which are layered on one another and wherein the gypsum strips are layered in a direction perpendicular to the plane of the closure or seal and wherein one end of a gypsum strip of the layer overlaps the end of a gypsum strip of a neighbouring layer.

Compl. specn. 15 pages.

Drg. 1 sheet.

CLASS : 97-F 159153
Int. Cl. : H 05 k 7/20.

AN ELECTRICAL CIRCUIT CONTAINING ELONGATE SELF-REGULATING HEATER AND COMPOSITE HEATING DEVICE FOR USE THEREIN.

Applicant : RAYCHEM CORPORATION, OF 300 CONSTITUTION DRIVE, MENLO PARK, CALIFORNIA 94025, U. S. A.

Inventors : 1. JOHN ARTHUR MIDGLEY, 2. RICHARD H. HULETT.

Application No. 442/Cal/83 filed April 15, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

24 Claims

An electrical circuit for heating device which comprises :

- (1) an elongate electrical self-regulating heating device which comprises :
 - (a) a first elongate electrical connection means;
 - (b) a second elongate electrical connection means; and
 - (c) a plurality of electrical heating elements which are connected in parallel with each other between the first and second electrical connection means;
- (2) at least a third elongate electrical connection means; and
- (3) a source of electrical power which (a) is connected to the one end of the first connection means and (b) is connected to the opposite end of the second connection means by the third connection means.

Compl. specn. 33 pages. Drg. 6 sheets

CLASS : 107-G 159154
Int. Cl. : F 02 m 25/00.

EXHAUST GAS TURBOCHARGER WITH ADJUSTABLE SLIDE RING FOR INTERNAL COMBUSTION ENGINES.

Applicant : BBC BROWN, BOVERI & COMPANY, LIMITED, OF CH-5401 BADEN, SWITZERLAND.

Inventor : 1. DR. HANSULRICH HORLER.

Application No. 495/Cal/83 filed April 26, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

9 Claims

An exhaust gas turbocharger with adjustable slide ring for an internal combustion engine, said exhaust gas turbocharger comprising :

- (a) a turbine having rotary blades, said rotary blades defining a cylindrical volume as they rotate;
- (b) an at least partially radial-flow turbine nozzle ring comprising a plurality of circumferentially spaced guide vanes sized, shaped, and positioned to cause exhaust gas to flow therebetween in a direction, said plurality of circumferentially spaced guide vanes having downstream edges which lie on an imaginary cylinder which is spaced outwardly from the cylindrical volume defined by the rotary motion of said rotary blades; and characterized by :

(c) a slide ring movable in the axial direction for altering the turbine inlet flow cross-section, said slide ring extending upstream between said nozzle ring and said rotary blades and being axially movable along the downstream edges of said guide vanes, said slide ring extending downstream beyond said rotary blades and having a radial internal contour which is closely spaced from the radially outer edges of said rotary blades over the entire axial travel of said slide ring and which forms the radial wall of a flow duct for exhaust gas downstream of said rotary blades.

Compl. specn. 18 pages.

Drg. 6 sheets

CLASS : 40-D & G; 139-B + 188 159155

Int. Cl. : B 32 b 15/00; B 01 j 1/10; C 01 b 33/00 + C 22 b 41/00.

PROCESS FOR MAKING AN AMORPHOUS SILICON AND GERMANIUM ALLOY FILM ONTO A SUBSTRATE.

Applicant : ENERGY CONVERSION DEVICES, INC. OF 1675 WEST MAPLE ROAD, TROY, MI 48084, UNITED STATES OF AMERICA.

Inventors : 1. DAVID DEAN ALLRED, 2. LEE WALTER, 3. STANFORD ROBERT OVSHINSKY, 4. JAIME MONZON REYES.

Application No. 549/Cal/83 filed May 4, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

7 Claims

A process for making an amorphous silicon and germanium alloy film onto a substrate, such as herein described, comprising :

providing a gas mixture comprising silane and germane in a deposition environment containing the substrate; heating the substrate below the temperature required for pyrolysis of silane and germane;

irradiating silane and germane with electromagnetic radiation below an energy level required to photochemically decompose the gas;

the combination of said heat and said radiation causing deposition of an amorphous silicon and germanium alloy film on the substrate.

Compl. specn. 28 pages.

Drg. 1 sheet

CLASS : 97-F 159156

Int. Cl. : H 05 b 1/00.

AN ELONGATE ELECTRICAL HEATER

Applicant : RAYCHEM CORPORATION, OF 300 CONSTITUTION DRIVE, MENLO PARK, CALIFORNIA 94025, U. S. A.

Inventor : 1. HUNDI PANDURANGA KAMATH.

Application No. 651/Cal/83 filed May 24, 1983.

Convention dated 25th May, 1982 (82 15198) United Kingdom.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

18 Claims

An elongate self-regulating electrical heater which comprises :

- (1) first and second elongate, spaced-apart, metal conductors which can be connected to a source of electrical power, and

(2) at least one elongate resistive heating strip which comprises an elongate resistive heating component which is composed of a conductive polymer having a resistivity at 23°C of 1 to 10,000 ohm. cm,

said heater exhibiting PTC behaviour when the conductors are connected to a source of electrical power to cause heating of said resistive heating strip, characterized in that the heating strip is in electrical contact alternately with the first conductor and the second conductor at contact points which are longitudinally spaced apart along the length of the strip and along the length of each of the conductors.

Compl. specn. 28 pages.

Drg. 5 sheets

CLASS : 186-E

159157

Int. Cl. : G 11 b 23/04.

MAGNETIC TAPE CASSETTE.

Applicant : EKO VIDEO LIMITED, OF UNIT 291, WESTERN INDUSTRIAL ESTATE, CLONDALKIN, COUNTY DUBLIN, REPUBLIC OF IRELAND.

Inventor : 1. JOSEPH HACKETT.

Application No. 559/Cal/83 filed May 5, 1983.

Convention dated 6th May, 1982 (GB 2120 204 B) Ireland.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

11 Claims

A tape cassette for use in a magnetic recording/reproducing apparatus, the cassette being of the kind comprising a housing having top and bottom plates with a pair of tape reels rotatably accommodated side-by-side in the housing between the said plates, a pair of spaced apertures in the bottom plate permitting entry into the housing of a pair of reel-engaging shafts of the said apparatus when the cassette is inserted into its position of use in the apparatus, and locking means automatically effective when the cassette is removed from the apparatus for substantially preventing inadvertent rotation of the reels when the cassette is not in its position of use, the locking means comprising a plurality of recesses formed on the outside surface of one flange of each tape reel adjacent the peripheral edge thereof, and locking lever means including a pair of brake members extending mutually away from one another and each extending partially across the adjacent region of the tape reel flanges of a respective tape reel, and each for engagement with any recess of a respective tape reel, the locking lever means being pivoted with respect to the housing and being resiliently biased for rotation in such a direction about the pivotal axis that the brake members are brought towards the respective tape reel flanges into locking engagement with respective recesses of the reels when the cassette is not in its position of use, and the cassette housing having an aperture for a release pin which, upon insertion of the cassette into its position of use in the apparatus, is operative to rotate the locking lever means in opposition to the resilient bias to disengage the brake members from the tape reels.

Compl. specn. 27 pages.

Drg. 7 sheets

CLASS : 107-C & G

159158

Int. Cl. : F 02 b 1/00.

INTERNAL COMBUSTION ENGINE.

Applicant : GRANT ENGINE DESIGN AND SALES INC. 1323 KARSHNER ROAD, PUYALLUP, WASHINGTON 98375, UNITED STATES OF AMERICA.

Inventor : 1. LLOYD LEE GRANT.

Application No. 659/Cal/83 filed May 25, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

11 Claims

An engine comprising :

- a first reciprocating cylinder;
- a second reciprocating cylinder;
- a piston housed within the first reciprocating cylinder;
- a second piston housed within the second reciprocating cylinder;
- a means of housing the first and second reciprocating cylinder;
- a compression wall within the first reciprocating cylinder,
- a compression wall within the second reciprocating cylinder,
- a means of injecting fuel at proper timing between the compression walls and the piston to cause combustion and reciprocating horizontal movement between the first and second reciprocating cylinders and the first and second pistons;
- a crankshaft;
- a means of withdrawing exhaust from the engine;
- a crankthrow affixed to the crankshaft,
- a second crankthrow affixed to the first crankthrow;
- a third crank throw affixed to the second crankthrow;
- three scotch blocks, each scotch block surrounding one crankthrow;
- three scotch yokes with each of the scotch blocks housed within one of the scotch yokes;
- a means of securing the first reciprocating cylinder to the first and third scotch yokes, said scotch yokes housing the first and third crankthrows;
- a means of securing the second reciprocating cylinder to the first and third scotch yokes, said scotch yokes housing the first and third crankthrows, and a means of securing the first and second pistons to the second scotch yoke, said scotch yoke housing the second crankthrow.

Compl. specn. 18 pages.

Drg. 5 sheets.

CLASS : 70 A, [LVIII(5)]

159159

Int. Cl. : C 08 j—1/34.

A PROCESS FOR THE PREPARATION OF CATION EXCHANGE MEMBRANES.

Applicants : SHRI RAM INSTITUTE FOR INDUSTRIAL RESEARCH, 19 UNIVERSITY ROAD, DELHI-110007, INDIA, AN INDIAN INSTITUTE REGISTERED UNDER THE SOCIETIES ACT.

Inventors : MRS. BALKAR SINGH, MADHUMITA SAROOP AND ARAGULA KRISHNA RAO.

Application for Patent No. 267/Del/1983 filed on 22nd April, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

3 Claims

An improved process for converting a sulphonate acid type cation exchange membrane into a carboxylic acid type derivative by converting sulphonate acid group on one or both sides of said membrane into sulphonyl chloride by applying phosphorous pentachloride to at least one of the sides of the said membrane, washing the membrane with carbon tetrachloride for removal of unreacted phosphorous pentachloride, treating the washed membrane with hydro

iodic acid for converting sulphonyl chloride to carboxylic acid characterized in that said membrane is heated to a temperature of 155 to 159°C for a period not exceeding 3½ hours such as to convert sulphonic acid group present in said side and the layer adjacent thereto into sulphonyl chloride.

Complete specifications 12 pages.

CLASS : 145 C [XXIV(4)]

159160

Int. Cl. : D 21 g, 1/00.

A FIBRE PRODUCT AND A METHOD FOR THE MANUFACTURE OF THE SAME.

Applicants : BOLIDEN AKTIEBOLAG, A SWEDISH COMPANY OF STUREGATAN 22, S 114 85 STOCKHOLM, SWEDEN.

Inventors : ERNST GUSTAF RANE RANHAGEN.

Application for Patent No. 287/Del/1983 filed on 7th May, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

15 Claims

A wood fibre product such as paper, board, cardboard, comprising 95 to 50% parts of b fibre 5 to 50% parts of minerals and upto 2% parts of binding agent wherein said fibre part consists of wood pulp obtained by processing wood so that besides the cellulose part, remaining components such as lignine, hemicellulose and other non-chemically dissolved wood constituents have been retained completely or partly, whereby the fibre yield is 55 to 90% of the total wood yield; the mineral part being selected from mica and optionally further known minerals, paper filler such as kaoline, chalk, titanium dioxide, and talc, the mica used having a particle size of at most 300 μm , obtained at the determination using standard sieve whereby K_{70} is less than 200 μm , and that it has a thickness of preferably less than 10 μm , and a flakiness (aspect ratio) of 10 to 100 preferably above 20 and the binding agent being selected from known binding agent such as rosin resin, aluminium sulphate, caseine, synthetic resins, starches and animalic glue.

A method for the manufacture of wood fibre containing products in the form of paper, cardboard and board as claimed in any preceding claim which comprises mixing together optionally with water to a from a stock 95 to 50% parts of fibre 5 to 50% parts of minerals and upto 2% parts of binging agent wherein said fibre part consists of wood pulp obtained by processing wood so that besides the cellulose parts, remaining components such as lignine, hemicellulose and other non-chemically dissolved wood constituents have been retained completely or partly, whereby the fibre yield is 55 to 90% of the total wood yield; the mineral parts being selected from mica and optionally further known minerals parts filler such as kaoline, chalk, titanium dioxide and talc, the mica used having a particle size of at most 300 μm , obtained at the determination using standard sieve whereby K_{70} is less than 200 μm , and that it has a thickness of preferably less than 10 μm , and a flakiness (aspect ratio) of 10 to 100, preferably above 20 and the binding agent being selected from known binding agent such as rosin resin, aluminium sulphate, caseine, synthetic resins, starches and animalic glue.

Compl. specn. 20 pages.

CLASS : 47 C&D

159161

Int. Cl. : E 21 c—43/00.

METHOD FOR THE GASIFICATION OF COAL CONTAINING CHLORINE.

Applicant : ALLIS-CHALMERS CORPORATION, A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 1126 SOUTH 70TH STREET, WEST ALLIS 14, WISCONSIN, UNITED STATES OF AMERICA.

Inventors : PETER JOSEPH PETIT AND KHOSROW FARNIA.

Application for Patent No. 299/Del/1983 filed on 10th May 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

9 Claims

A method for the gasification of coal containing chlorine characterised in that :

- (a) combusting a near stoichiometric of a combustible fuel and an oxygen containing gas to produce an exhaust gas containing essentially no free oxygen;
- (b) diluting said exhaust gas with a diluent gas containing essentially no free oxygen to produce a product gas of a mixture of diluent gas exhaust gas;
- (c) introducing a flow of said product gas to said reactor;
- (d) measuring the temperature of said product gas introduced to said reactor;
- (e) increasing the temperature of said product gas flowing to said reactor in response to the temperature of said product gas within said reactor to increase the temperature of said product gas within said reactor at a rate sufficiently low to prevent thermal induced cracking of said refractory lining;
- (f) increasing the temperature of said product gas within said reactor until said reactor achieves said operating temperature profile;
- (g) discontinuing said flow of said product gas to said reactor when said reactor achieves said operating temperature; and thereafter,
- (h) charging said reactor with coal and initiating said autothermic gasification process in known manner to produce coal gas.

Compl. specn. 17 pages.

Drg. 2 sheets

CLASS : 32 F, b & 77 C

159162

Int. Cl. : A 23 d—5/00.

A CONTINUOUS METHOD FOR THE SELECTIVE HYDROGENATION OF EDIBLE OILS AND FATS.

Applicant : UOP INC., A CORPORATION ORGANIZED IN THE STATE OF DELAWARE, WITH ITS PRINCIPAL PLACE OF BUSINESS AT TEN UOP PLAZA, ALGONQUIN & BT. PROSPECT ROADS, DES PLAINES, ILLINOIS 60016, U. S. A.

Inventor : BRUCE IRWIN ROSEN.

Application for Patent No. 322/Del/1983 filed on 17th May, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

12 Claims

A continuous method for the selective hydrogenation of edible oils and fats which comprises contacting a flowing mass of edible oils and fats at a temperature from 150 to 260°C in the presence of hydrogen at a pressure up to 150 psig (1000 kPa gauge) with a fixed mass of catalyst consisting essentially of a catalytically active metal selected from Group VIII of the Periodic Table supported on alpha-alumina having a surface area less than about 10 m^2/g a micropore volume less than 0.1 ml/g and a macropore volume less than 0.6 ml/g and recovering by a known method the resultant hydrogenated product.

Complete specification 22 pages.

CLASS : 128G

159163

Int. Cl. : A 61 b 5/00.

A METHOD FOR PREPARING AN ANALYTICAL TEST DEVICE FOR DETERMINING GLUCOSE.

Applicant : MILES LABORATORIES, INC., MANUFACTURERS, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, DOING BUSINESS AT POST OFFICE BOX 40, 1127 MYRATLE STREET, ELKHART, INDIANA 46515, UNITED STATES OF AMERICA.

Inventors : SHUENN-TZONG CHEN, MARK SHERWOOD & MARY ELLEN WAROCHAL.

Application for Patent No. 336/Del/83 filed on 23rd May, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

9 Claims

A method for preparing an analytical test device for determining glucose in a liquid sample which method comprises the steps of :

- (a) impregnating by known method a carrier such as herein described with a first solution having dissolved therein 4-amino-antipyrine or a salt thereof and 3-hydroxy-2, 4, 6-triiodobenzoic acid or 3, 5-dichloro-2-hydroxy-benzene sulfonic acid, or a salt thereof, a glucose oxidase and a peroxidase, and drying the carrier; and
- (b) applying by known method to the carrier a second solution of film-forming agent in a volatile solvent, such as herein described and drying to remove the volatile solvent and leave a film over the dried first impregnant.

Compl. specn. 15 pages.

Drg. 1 sheet.

CLASS : 32 B [IX(1)]

159164

Int. Cl. : C 07 c—11/02.

PROCESS FOR THE CATALYTIC CONVERSION OF METHANOL TO HYDROCARBONS MAINLY OLEFINS.

Applicants : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : PAUL RATNASWAMY, SUNEETA BALVANT KULKARNI, IKKANDATH BALKRISHNAN, BOLPAGADA SESAGIRI RAO, VASUDEO PANDURANG SHIRALKAR, SOORYAKANT GANESH HEDGE AND RAMESH BABASAHEB BORADE.

Application for Patent No. 370/Del/1983 filed on 02 Jun 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

5 Claims

A process for the catalytic conversion of methanol to hydrocarbons mainly olefins comprising treating methanol at a temperature in the range of 300°—400°C with a catalyst composite material comprising a mixture of amorphous and crystalline alumina, silica and aluminosilicates having a sodium oxide to aluminium oxide molar ratio of at least 0.03, but not more than 3, the said crystalline aluminosilicate having a silica to alumina ratio of at least 25 but not more than 1000, said amorphous aluminosilicate having a silica to alumina ratio of at least 5 but not more than 300.

Complete specification 11 pages.

CLASS : 27 E & 27 I

159165

Int. Cl. : E 04 f 13/00 & 15/00.

METHOD OF AND APPARATUS FOR PRODUCING DECORATIVE FLOOR AND WALL COVERING.

Applicants : GERALD S.A., F 50, COURS DE LA REPUBLIQUE, VILLEURBANNE, RHONE, FRANCE, A FRENCH COMPANY.

Inventors : DANIEL BERENGER.

Application for Patent No. 408/Del/1983 filed on 16th June, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

12 Claims

A process for continuously producing a floor or wall covering in the form of a patterned sheet which comprises the steps of :

applying a thermally activatable plastisol layer to a sheet support to form a plastisol-coated sheet; contacting said plastisol-coated sheet with the pattern-carrying face of a transfer paper provided with a transferable pattern;

subjecting said combination of plastisol-coated sheet and transfer paper to the simultaneous action of heat and pressure so as to thermally activate said plastisol and cause it to gelify while said transfer paper is in contact therewith, thereby effecting transfer of said pattern from said paper to said gelified plastisol to provide in a single operation the desired floor or wall covering in the form of a patterned sheet.

Compl. specn. 20 pages.

Drg. 2 sheets

CLASS : 32 E

159166

Int. Cl. : C 08 f 7/00.

A PROCESS FOR THE PREPARATION OF A STERICALLY STABILISED AQUEOUS POLYMER DISPERSION.

Applicant : IMPERIAL CHEMICAL INDUSTRIES PLC., OF IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON SW1P 3JF, ENGLAND, A BRITISH COMPANY AND DULUX AUSTRALIA LTD, OF 35, COLLINS STREET, MELBOURNE VICTORIA, AUSTRALIA, AN AUSTRALIAN COMPANY.

Inventors : STEPHEN PARRY DAVIES, MORICE WILLIAM THOMPSON, DAVID VINCENT GIBSON AND RODNEY WALTER PARR.

Application for Patent No. 471/Del/83 filed on 11th July, 1983.

Convention date 29th July, 1982/8221894/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

27 Claims

A process for the preparation of a sterically stabilised aqueous polymer dispersion, in which at least one ethylenically unsaturated monomer of the kind such as herein described having a solubility in water in the range 0.08-8% by weight but giving rise to a polymer which is insoluble in water, is emulsified in water in the presence of a non-ionic surface active compound of the kind such as herein described which comprises in the molecule (a) a component of molecular weight at least 400 which is per se soluble in the aqueous phase, (b) another component of molecular weight in the range 150-1000 which is per se soluble in the monomer phase and (c) an unsaturated grouping which is capable of copolymerising with the monomer or monomers, the said

grouping being attached to or integral with the monomer-soluble component aforementioned, and the emulsified monomer is then subject to polymerisation in the additional presence of a non-ionisable free radical type organic azo polymerisation initiator of the kind such as herein described which is soluble in water and substantially insoluble in the monomer or monomers.

Compl. specn. 27 pages.

Drg. 3 sheets

CLASS : 98 B

159167

Int. Cl. : B 01 j—3/00.

A HOOD FOR USE WITH A BIO GAS DIGESTER.

Applicant : KAPCOMPANY GENERAL LIMITED, C/O KAPUR SOLAR FARMS, BIJWASAN NAJAFGARH, ROAD, P.O. HERA, NEW DELHI-110037, INDIA, AN INDIAN COMPANY.

Inventor : JAGDISH CHANDRA KAPUR.

Application for Patent No. 482/Del/1983 filed on 16th July, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

5 Claims

A hood for use with a bio gas digester comprising an annular wall extending upwardly from the upper surface of said hood such as to define a chamber for storing water, the upper surface of said hood forming the base of said chamber, a transparent sheet held to the upwardly extending annular wall, said transparent sheet being an insulation means for preventing the loss of heat through the upper surface of said hood.

Compl. specn. 7 pages.

Drg. 1 sheet

159168

Int. Cl. : B 60t and F 15b.

SERVO-MOTOR FOR POWER-ASSISTED BRAKING.

Applicant : D. B. A., OF CENTRE PARIS PLEYEL, 93421 ST. BENIS CEDEX 01 FRANCE, A FRENCH COMPANY.

Inventors : PIERRE PRESSACO AND JEAN-JACQUES CARRE.

Application for Patent No. 681/Del/1983 filed on 30 Sep 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

13 Claims

A servo motor for power-assisted braking, comprising a housing having opposite end walls, a wall structure movable axially in said housing and dividing the latter into a first chamber and a second chamber, the wall structure having a central hub portion, and a control valve located in the central hub portion and actuatable to establish selective communication between said two chambers, characterised in that said chambers of said housing are sealingly delimited internally by a first flexible wall and a second flexible wall, respectively, which connect said central hub portion to the corresponding said end wall of the housing, and in that said central hub portion includes at least one through passage interconnecting permanently the central zones delimited externally by said first and second flexible walls.

Compl. specn. 11 pages.

Drg. 3 sheets

2—7GI/87

CLASS : 166-E & G

159169

Int. Cl. : B 63 b 35/00.

AN OFFSHORE STRUCTURE.

Applicant : J. RAY McDERMOTT & CO., INC., AT 1010 COMMON STREET, NEW ORLEANS LOUISIANA 70112, UNITED STATES OF AMERICA.

Inventors : 1. CHARLES ELSWORTH YOUNG, 2. STEPHEN ALLEN WILL.

Application No. 1376/Cal/83 filed November 9, 1983.

Division of Application No. 136/Cal/80 dated 5th February 1980.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

7 Claims

A structure comprising, in combination, independent alignment means adapted for placing in predetermined locations in the vicinity of an underwater fixture, and a jacket structure for installation in deep water over such underwater fixture, said jacket structure having guide means for engaging said independent alignment means to locate the structure relatively to the underwater fixture, and means for maneuvering said jacket structure to effect said engagement of the independent alignment means by said guide means.

Compl. specn. 17 pages.

Drg. 4 sheets

CLASS : 64-A

159170

Int. Cl. : H 01 h 85/08.

MAGNETIC ARC EXTINGUISHING FUSIBLE ELEMENTS.

Applicant : McGRAW-EDISON COMPANY, OF 1701 GOLF ROAD, ROLLING MEADOWS, ILLINOIS 60008 U.S.A.

Inventor : 1. ALDINO J. GAIA.

Application No. 1487/Cal/83 filed December 5, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

16 Claims

A fuse element having electro-magnetic arc extinguishing characteristics, including in combination :

bifurcated electrically conductive means; and

first and second terminal means at opposite ends, respectively, of the bifurcated electrically conductive means for connecting the bifurcated electrically conductive means into an electrical circuit;

the bifurcated electrically conductive means comprising between the first and second terminal means, at least one first weak spot and at least one second weak spot, said weak spots comprising fusible material and at least portions of the first and second weak spots being disposed substantially parallel to each other;

the first and second weak spots being arranged such that current flow, between the first and second terminal means, in the parallel portion of one of the first and second weak spots is opposite in direction to current flow in the parallel portion of the other of the first and second weak spots;

whereby a magnetic force of repulsion is generated between the first and second weak spots, thereby to lengthen arcs formed in the weak spots by an over current passing therethrough.

Compl. specn. 17 pages.

Drg. 2 sheets

CLASS : 49-E

159171

Int. Cl. : A 47; 2700.

PRESSURISABLE CONTAINER HAVING A SAFETY DEVICE FOR RELEASING EXCESS PRESSURE FROM A CONTAINER.

Applicant : SIEMENS AKTIENGESELLSCHAFT, OF BERLIN AND NUNCHEAN WITTELSBACHER 2, D-8000 MUNCHEN, FEDERAL REPUBLIC OF GERMANY.

Inventor : 1. KURT VOIGTLANDER.

Application No. 1573/Cal/83 filed December 22, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

8 Claims

A pressurisable container having a pressure release outlet, a rupturable closure element closing said outlet, a cutting device arranged to rupture the closure element when a predetermined maximum pressure in the container is exceeded, a rigid retaining device which holds the cutting device in a position out of engagement with the closure element when the container pressure is less than the predetermined maximum pressure, and a predetermined weakening provided on the retaining device which breaks when the predetermined maximum pressure is exceeded so as to allow the cutting device to move under the action of the pressure in the container so as to rupture the closure element, in which:

- (a) the retaining device is rigidly connected to the cutting device;
- (b) the cutting device is rigidly connected to a first plate;
- (c) the closure element is clamped between said first plate and a second plate in such a way as to define a rupturable rim of the closure element to be engaged by a cutting edge of the cutting device; and
- (d) the retaining device, the cutting device and the first plate are arranged on the side of the closure element which faces the interior of the container.

Compl. specn. 10 pages.

Drg. 1 sheet

CLASS : 32-E; 128-A

159172

Int. Cl. : C 08 g 30/08.

PROCESS FOR PREPARING RESILIENT CELLULAR POLYMERS FROM A MINE TERMINATED POLY(OXYALKYLENE) AND-POLYFUNCTIONAL EPOXIDES.

Applicant : PERSONAL PRODUCTS COMPANY, OF VAN LIEW AVENUE, MILLTOWN, NEW JERSEY 08850, UNITED STATES OF AMERICA.

Inventor : 1. SHMUEL DABI.

Application No. 18/Cal/84 filed January 9, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

14 Claims

A process for preparing an absorbent, resilient, flexible, cellular polymeric material which comprises reacting at least one epoxy resin with an amine terminated poly(alkylene oxide) selected from the group consisting of amine terminated poly(propylene oxide), amine terminated poly(ethylene oxide), amine terminated copolymers of ethylene oxide and propylene oxide, and mixtures thereof wherein the ratio of ethylene oxide groups to propylene oxide groups in the reaction mixture ranges from 1 to 15.

Compl. specn. 22 pages.

Drg. 1 sheet

CLASS : 136-E

159173

Int. Cl. : B 29 d 27/00.

APPARATUS FOR CONTINUOUS MANUFACTURE OF FOAMED COMPOSITE PRODUCTS.

Applicants & Inventors : (1) VSILY SERGEEVICH BOROVKOV, OF ULITSA PETROVKA, 24, KV. 36, MOSCOW, USSR AND (2) IVAN VASILIEVICH MOKHOV, OF ULITSA PROFSOJUNAYA, 48, KORPUS 4, KV. 20, MOSCOW, USSR.

Application No. 76/Cal/84 filed February 2, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

2 Claims

An apparatus for continuous manufacture of foamed composite products comprising a hopper supplying a foaming composition, means of feeding the sheets of cladding into a moulding unit, a heating chamber and a cutting-up device, the moulding unit being made up of two pallet conveyors located one above the other, riding on rollers, girdled with endless belts and flanked by moulding members and the pallets being provided in the form of intersecting rows of longitudinal and transverse strength members which form open cells; the pallets are provided with traction pads which are fitted to the transverse strength members and interact with said rollers extending throughout the heating chamber in the direction of pallet conveyor travel.

Compl. specn. 9 pages.

Drg. 2 sheets

CLASS : 45-G1

159174

Int. Cl. : E 03 d 1/02.

A FLUSH SYSTEM.

Applicant & Inventor : BENGT ARNE PERSON, OF CORSO ITALIA 28 B, CAMPIONE D' ITALIA, ITALY.

Application No. 713/Cal/84 filed October 11, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

6 Claims

A flushing system which is designed to deliver a given volume of water which is supplied from a water-supply valve means (6) to an inlet (7) of an accumulation chamber (5), characterized in that a float-controlled discharge valve (19) is arranged to be opened when said given volume of water has been delivered to the accumulating chamber and the float (27) is located at a corresponding level in said chamber (5); in that a supply pipe (13) communicating with said inlet extends downwardly in the accumulating chamber (5) towards said outlet (3); in that a valve housing (19) co-acting with said float (27) is slidably arranged, together with said float, on said water supply pipe (13); in that in the closing position of the valve housing, the lower edge part of said valve housing is arranged, in the absence of said given volume of water in the accumulating chamber, to abut or to lie closely adjacent to a seating (4; 43) encircling the outlet (3); in that in the opening position of the valve housing, when the accumulating chamber (5) has received said given volume of water, the valve housing is arranged to be lifted relative to the seating by said float (27); in that the lower end of the supply pipe is formed with a valve body (17), arranged together with the inner wall (23) of the valve housing, to form a pressure chamber (24) having at least one leakage opening; and in that the supply pipe is provided above the valve body with at least one supply opening (18) which communicates with the accumulating chamber (5) in the closing position of the valve housing (19), the arrangement being such that when the valve housing (19) is lifted together with the float (27), said supply opening (18) is brought into communication with the pressure chamber (24), whereupon the water under pressure in the pressure chamber lifts the valve housing (19) relative to the valve body (17) to a highest position, in which water in the accumulating chamber (5) can

run freely out through the outlet and hold the valve housing (19) in said highest position, at least until the supply of water to the water supply pipe (13) ceases.

Compl. Specn. 14 pages.

Drgs. 2 sheets

CLASS : 128-A.

159175

Int. Cl. : A 61 f 13/00.

AN IMPROVED CATA MENIAL DEVICE HAVING AN ABSORBENT THERMAL BONDED NON-WOVEN FABRIC.

Applicant : CHICOPEE, OF 317, GEORGE STREET, NEW BRUNSWICK, NEW JERSEY 08903, U.S.A.

Inventors : 1. PAUL FEKETE, 2. ALFRED THOMAS MAYS.

Application No. 790/Cal/84 filed November 16, 1984.

Division of Application No. 744/Cal/82 dated 25th June, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

4 Claims

An improved catamenial device having an absorbent, thermal bonded non-woven fabric having a bulk density below about 0.15 gram per cubic centimeter, said fabric comprising absorbent fibres and staple length conjugate fibres, said conjugate fibres being composed of polyethylene and polyester, wherein a substantial proportion of the surfaces of said conjugate fibres comprises said polyethylene said non-woven fabric having laminated thereto an impermeable layer, said impermeable layer having applied thereon a pressure-sensitive adhesive element for adhering to an undergarment, said pressure-sensitive element having a protective layer to protect the same prior to use.

Compl. Specn. 20 pages.

Drgs. 2 sheets.

CLASS : 32-E + 32-F₃ a + 32-F₃ c.

159176

Int. Cl. : C 08 g 23/00, 23/20, 23/22.

PROCESS FOR THE PREPARATION OF ANIONIC SURFACE-ACTIVE COMPOUNDS BASED ON OXYALKYLATED NAPHTHOL NOVOLACS.

Applicant : HOECHST AKTIENGESELLSCHAFT OF D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

Inventors : 1. HEINZ UHRIG, 2. KLAUS EHL.

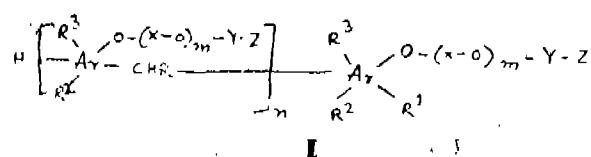
Application No. 17/Cal/85 filed 10th January, 1985.

Division of Application No. 140/Cal/82 dated 5th February, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

2 Claims

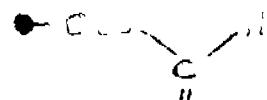
A process for the preparation of an anionic surface active oxalkylated naphthol novolac of the general formula I of the accompanying drawings



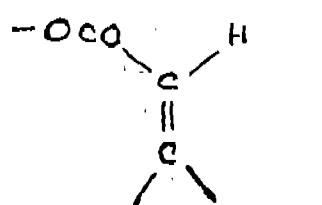
in which Ar denotes naphthalene, X denotes CH_2CH_2 - and/or $-\text{CH}_2\text{CH}(\text{CH}_3)-$, Y denotes identical or different radicals of the formulae $-\text{CH}_2\text{CH}_2$, $-\text{CH}_2\text{CH}(\text{CH}_3)-$ and $-\text{CH}_2\text{CHOHCH}_2$, Z denotes identical or different radicals of the formulae VIII, IX, X and XI



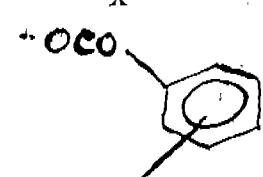
VIII



IX



X



XI



in which M represents a cation, with the proviso that at least one radical Z is different from OH, R¹, R² and R³ denote hydrogen or alkyl having 1 to 14 C atoms, R denotes hydrogen or alkyl having 1 to 9 C atoms, m denotes a number from 1 to 150 and n denotes a number from 1 to 9, which comprises reacting a compound of the formula (I) in which all of the radicals Z denotes OH in which Ar X, Y, R, R¹, R², R³, m and n have the meaning mentioned above, with 1 to (n + 1) moles of a compound selected from the group consisting of maleic acid, maleic acid anhydride, furmaric acid, 1, 2-, 1, 3-, 1, 4-benzene-dicarboxylic acid and phthalic anhydride and neutralizing obtained acids with a base MOH in which M has the meaning mentioned above.

Compl. Specn. 28 pages.

Drg. 1 sheet.

CLASS : 32-F₁ + 32-F₂ b + 55-E₄.

159177

Int. Cl. : A 61 k 27/00; C 07 d 31/00, 53/00.

A PROCESS FOR THE PREPARATION OF PYRIDO-[1, 4] BENZODIAZEPINES.

Applicant : A. H. ROBINS COMPANY, INCORPORATED OF 1407 CUMMINGS DRIVE, RICHMOND, VIRGINIA 23220, UNITED STATES OF AMERICA.

Inventors : 1. CHANDLER ROY TAYLOR JR., 2. YOUNG SEK LO.

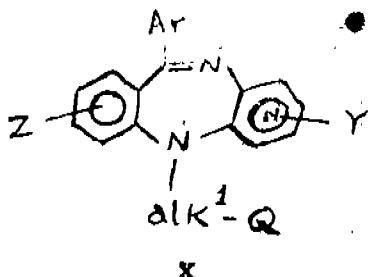
Application No. 77/Cal/85 filed February 4, 1985.

Division of Application No. 1436/Cal/82 dated 10th December, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

2 Claims

A process for the preparation of pyrido-[1, 4] benzodiazepines of the formula X as shown in the accompanying drawings,



wherein

Q is selected from the group consisting of hydrogen, chloro or $-NR^1R^2$ where R^1 and R^2 are selected from the group consisting of loweralkyl or taken together with the adjacent nitrogen atom form a heterocyclic residue selected from 1-phthalimido, 4-morpholinyl, 1-pyrrolidinyl, 1-piperidinyl or 4-substituted-1-piperazinyl;

Ar is selected from the group consisting of 2 or 3-thienyl, 2, 3 or 4 pyridinyl, phenyl or phenyl substituted by 1 to 3 radicals selected from halo, loweralkyl, loweralkoxy, trifluoromethyl or nitro and may be the same or different;

alk¹ is a straight or branched hydrocarbon chain containing 1-8 carbon atoms;

Z is selected from the group consisting of hydrogen, halogen, loweralkyl, loweralkoxy or nitro;

Y is selected from the group consisting of hydrogen or 1-2 radicals selected from loweralkyl loweralkoxy and may be the same or different;

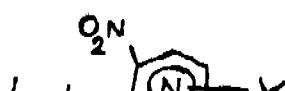
and the acid addition salts thereof which comprises the steps of

Step (1) reacting an aniline having the formula VII of the drawings



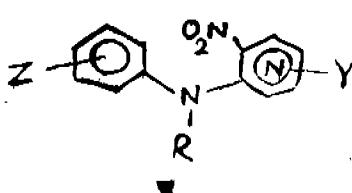
VII

with a halo-nitropyridine having the formula VI of the drawings



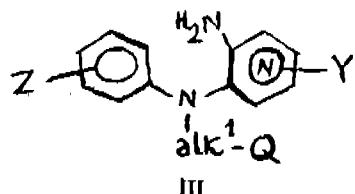
VI

at 120°C or above to produce a nitro-N-phenyl-pyridinamine having the formula V of the drawings



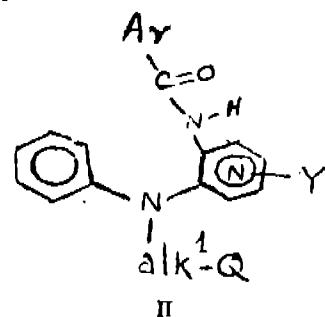
wherein R is lower alkyl (Q = H) in $R = -alk¹-Q$ and Y and Z are as defined

Step (2) reducing in a known manner a compound of formula V of the drawings prepared in Step 1 wherein R is loweralkyl (Q = H) in $R = -alk¹-Q$ to give a compound having the formula III of the drawings



wherein $R = -alk¹-Q$, alk, Y and Z are as defined above and Q has the same value as the nitro compound prior to reduction;

Step (3) reacting the compound prepared in Step 2 with an aryl halide in an aprotic solvent to produce an N-substituted-N-phenyl-aryloaminopyridinamine of the formula II of the drawings



wherein alk¹, Y, Z, Ar and Q are as defined above; and

Step (4) cyclizing by heating a compound prepared in Step 3 to the pyrido [1, 4] benzodiazepine with a cyclizing agent as herein described and optionally preparing a pharmaceutically acceptable salt of the pyrido [1, 4] benzodiazepine by reacting with an appropriate acid as herein described.

Compl. Specn. 67 pages.

Drgs. 4 sheets.

159178

CLASS : 53-B.

Int. Cl. : B 62 1 5/00.

BRAKE FOR BICYCLES.

Applicant & Inventor : RUNE LOHMAN, SMEDJEVA-GEN 16, 131 33 NACKA, SWEDEN.

Application No. 307/Cal/85 filed April 22, 1985.

Division of Application No. 298/Cal/84 dated 3rd May, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

7 Claims

Brake operating mechanism, for bicycles, for preventing overload of braking members and reducing the risk of locking the brake after braking, said mechanism comprising a first free-wheel (123, 126) disposed in the driven wheel of the bicycle, an actuating means (8, 29) which via a second free-wheel (2-5, 21, 27-29) being connected to the crank portion of the bicycle, said second free-wheel adapted to act in a direction opposite to the first free-wheel, said actuating means remaining inactive during pedalling in driving direction but being activated upon pedalling in braking direction to thereby impart a braking action through brake members connected to said activating means characterized in that said second free wheel being connected to said activating means together with a friction coupling

(5—10, 18—24), serving to reduce the force transmitted from the crank portion to the brake means during heavy braking.

Compl. Specn. 10 pages.

Drgs. 2 sheets.

CLASS : 84C.

159179

Int. Cl. : C101 5/00 & 5/40.

"A PROCESS FOR PRODUCTION OF FUEL IN A BRIQUETTED FORM FROM THE WASTES OF SUGAR MILLS".

Applicant : PREM DUTTA GROVER, Professor and Head, Department of Chemical Engineering, Indian Institute of Technology, Hauz Khas, New Delhi-110 016, India, an Indian national.

Inventor : PREM DUTTA GROVER.

Application for Patent No. 4/Del/1983 filed on 1st January, 1983.

Complete specification left on 2nd April, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110 005.

5 Claims

A process for producing fuel in a briquetted form from the wastes of sugar mills such as shredded bagasse, fermentation sludge and spent wash liquor sludge which comprises in subjecting bagasse to a step of partial carbonization at a temperature of 225 to 230°C and for a period of upto 30 minutes cooling said partially carbonized product, adding fermentation sludge and spent wash liquor thereto, shaping and drying said product.

Provisional Specification 5 pages.

Compl. Specn. 8 pages.

CLASS : 206 E.

159180

Int. Cl. : H 04b 1/06, 7/14.

"A FREQUENCY HOPPING RADIO COMMUNICATION SYSTEM".

Applicant : THE MARCONI COMPANY LIMITED, a British Company, of the Grove, Warren Lane, Stanmore, Middlesex, England, (formerly of Marconi House, New Street, Chelmsford, Essex, CM1 1PL, England).

Inventors : PAUL WILKINSON DENT.

Application for Patent No. 30/Del/83 filed on 18th January, 1983.

Convention Date on 27th October, 1982/8202357/(U.K.).

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110 005.

5 Claims

A frequency hopping radio communication system comprising a plurality of radio transmitter/receiver sets each of said sets including frequency hopping means for changing the operating frequency periodically according to a main-line pseudo-random channel sequence, a stored key-variable data word, identical for all of said sets, which dataword determines said main-line channel sequence, switch means having normal and modified conditions connected to said frequency hopping means for modifying the generation of said main-line sequence to produce a side-track sequence the identity of which is dependent upon the point in the main-line sequence at which said switch means is operated to its modified conditions, communication initiating means connected to said switch means and to the radio set transmitter to initiate operation of said switch means in the transmitting and receiving radio sets to their modified conditions following transmission of a selected address signal to permit communication on a common side-track sequence

between said transmitting and receiving radio sets, and communication termination means connected to said switch means and to the radio set transmitter to initiate reversion of said switch means in the transmitting and receiving radio sets to said normal condition and consequent reversion to said main-line sequence in both transmitting and receiving radio sets.

Compl. Specn. 12 pages.

Drgs. 2 sheets.

CLASS : 206 E & 29 A.

159181

Int. Cl. : G06f-13/06 & H04q-1/20.

"APPARATUS FOR GIVING IDENTITY TO, AND SELECTING OF A PLURALITY OF FUNCTION UNITS IN A TELECOMMUNICATION SYSTEM".

Applicant : TELEFONAKTIEBOLAGET L M ERICSSON, of S-126 25 Stockholm, Sweden, a Swedish company.

Inventor : JAN LENNART BERGMAN.

Application for Patent No. 34/Del/1983 filed on 19th January, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110 005.

2 Claims

Apparatus for identifying and selecting one of a plurality of function units in a telecommunication system wherein :

each of said function units (2) comprises an access signal terminal (8) and a control information gate (9) connected through a control information transfer bus (6) to a control information generator (4), said apparatus being characterised by :

(a) a number pair generator (5) whose first output is connected through an address number decoder (7) to the access signal terminals (8) of the function units (2) and whose second output is connected to the information transfer bus (6),

(b) identification number registers (11, 12), each of which is provided in the associated function units (2), each register being provided with a first input which is connected to said information bus (6) and with a second input which is connected to the associated access signal terminal (8),

(c) comparators (15, 16), each of which is provided in the associated function units (2) each comparator having its first input (A) connected to the output of the associated identification number register (11) and its second input (B) connected to the information bus (6),

(d) access signal converters (17, 18) each of which is arranged in an associated function unit (2), each converter having connected a first input to the associated access signal terminal (8), a second input to the output (A B) of the associated comparator (15), and its output to a control input of the associated control information gate (9).

Compl. Specn. 8 pages.

Drg. 1 sheet.

CLASS : 108 C.

159182

Int. Cl. : C21c-5/34, 7/00, 7/04.

"PROCESS FOR THE PRODUCTION OF LOW HYDROGEN CONTAINING STEEL".

Applicant : UNION CARBIDE CORPORATION, Manufacturers a corporation organised existing under the laws of the State of New York, and having offices at of old Ridgebury Road, Danbury, State of Connecticut, 06817, United States of America.

Inventors : STEWART KEENEE MEHLAN, RUNALD JOSEPH SELINES, ROCKNE JAMES ANDREINI AND BALKISHAN AGRAWAL.

Application for Patent No. 42/Del/1983 filed on 21st January, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

9 Claims

Process for the production of low hydrogen containing steel by means of the AOD process which comprises : charging a steel melt into a refining vessel equipped with at least one submerged tuyere, making alloying and slag-forming additions to the melt, decarburizing the melt by injecting into the melt through said tuyere(s) a gas mixture comprising oxygen and a dilution gas, the decarburization being followed by at least one reduction or finishing step during which there is injection of a sparging gas into the melt through said tuyere(s), said tuyere(s) being gas-cooled during at least the reduction or finishing step, characterized in that it comprises, in combination :

- (A) providing an essentially dry refining vessel into which the melt is charged;
- (B) providing essentially dry cooling gas to the tuyere(s);
- (C) completing essentially all of the slag-forming additions to the melt prior to start of the decarburization;
- (D) fluxing the slag-forming additions prior to start of the decarburization;
- (E) completing substantially all difficult to oxidize alloying additions to the melt prior to the start of the decarburization;
- (F) decarburizing the melt to essentially its aim carbon content by injecting into a melt through said tuyere(s), a gas mixture of oxygen and dilution gas for a time sufficient to remove at least 0.2 weight per cent carbon from the melt, at a flow rate sufficient to generate off-gas flow sufficient to keep air from infiltrating into the vessel; and
- (G) maintaining said off-gas flow during the reduction and/or finishing step(s) by injecting at a sufficient rate sparging gas into the melt through said tuyere(s), in an amount at least equal to 2.8 m³ (100 cubic feet) per ton of melt.

Compl. Specn. 20 pages.

CLASS : 143D₅ & 4 & 10D. 159183
Int. Cl. B65b, 47/00.

"APPARATUS FOR THE PACKING OF VISCOUS, GEL-LIKE EXPLOSIVE MATERIAL INTO CONVOLUTE PAPER TUBES".

Applicant : C-I-L INC., a corporation of Canada, of 90 Sheppard Avenue, East North York, Ontario, Canada.

Inventor : HORST FRITZ MARZ.

Application for Patent No. 49/Del/1983 filed on 27th January, 1983.

Convention date on 2nd February, 1982/395, 363/ (Canada).

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110 005.

4 Claims

An apparatus for the packing of viscous gel-like explosive into convolute paper tubes comprising in combination :

- (a) a rotating cutter whereby selected sections of paper film are cut from a paper source,
- (b) a feeder whereby said pre-cut paper sections are fed to a rotating, paper-winding, mandrel,
- (c) a hollow, rotating, paper-winding, mandrel whereon a pre-cut paper section is formed into a convolutely wound paper tube, the said hollow mandrel having an internal hollow extrusion tube through which viscous explosives may be passed and said hollow mandrel also having a taut wire cutting means affixed to its downstream end,

- (d) a crimping means whereby the open leading end of the said convolutely wound paper tube may be folded closed upon said winding mandrel,
- (e) dispensing extrusion means whereby a measured volume of explosive is charged into the said wound and crimped paper tube upon the said mandrel, the charge tube being displaced from the said mandrel,
- (f) holding means whereby the said displaced, explosive-charged paper tube is restrained for end closure, and
- (g) crimping means whereby the open trailing end of the said explosive-charged paper tube is folded closed.

Compl. Specn. 12 pages.

Drgs. 3 sheets.

CLASS : 27 I. O.

159184

Int. Cl. : EO4b, 1/64.

"AN IMPROVED METHOD OF DAMP PROOFING BRICK WORK AND MEANS IN RELATION THERETO."

Applicant : Madhok Construction Company (Private) Limited, B-19, Chirag Enclave, New Delhi-110 048. An Indian Company.

Inventor : KRISHAN KUMAR MADHOK.

Application for Patent No. 43/Del/1983 filed on 24th January, 1983.

Complete specification left on 24th April, 1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110 005.

6 Claims

An improved method of damp proofing brick-work or other structural masonry wherein a chemical barrier is created at a pre-determined height, as herein defined, from the floor or ground in the said wall by injection of a damp proofing medium and creation of a chemical damp proof course; the said process involving the insertion of perforated, hard and rigid pipes such as pipes of galvanised or mild steel, plastic or PVC into lateral holes of uniform size drilled into the said walls; the said pipes covered by sponge sleeves and having means for feeding damp proof medium from one and either by way of a plurality of units one for each hole or a single transfusion unit connected thereto by means of a common longitudinal connecting pipe.

Provisional specification 3 pages.

Compl. Specn. 8 pages.

Drgs. 3 sheets.

CLASS : 140 B₁

159185

Int. Cl. : C 101 10/00, 10/06.

"PROCESS FOR PREPARING A DIESEL ENGINE FUEL HAVING IMPROVED COMBUSTION PROPERTIES".

Applicant : RUHRCHEMIE AKTIENGESELLSCHAFT, of Bruchstrasse 219, Oberhausen 13, Federal Republic of Germany, a company incorporated under the laws of the Federal Republic of Germany and WENZEL & WEIDMANN GmbH, of Mineraloelwerk, Eschweiler, West Germany.

Inventors : MANFRED WILDERSOHN, WERNER DEWIN, VELA TIHANYI AND JURGEN WEBER.

Application for Patent No. 78/Del/83 filed on 8th February, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110 005.

19 Claims

A process for preparing a diesel engine fuel having improved combustion properties wherein a mixture of neutral salts of carboxylic acids of the kind such as herein described and metals of the atomic numbers 57 to 71 and free carboxylic acids of the kind such as herein described are added to the diesel fuels.

Compl. Specn. 14 pages.

CLASS : 39 P [III]

159186

Int. Cl. : C 01 b—17/96 and C 01 g—49/06.

AN IMPROVED PROCESS FOR THE PREPARATION OF A METAL SULPHATE.

Applicants : COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : TURAGA PRABHAKARA PRASAD AND RANGADHAR NAYAK.

Application for Patent No. 113/Del/1983 filed on 22nd February 1983.

Complete specifications left on 18-5-1984.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

5 Claims

An improved process for preparing a metal sulfate from the sulfur vapour resulting from the roasting of iron (ii) sulphate heptahydrate, in the formation of iron oxide and metal oxide/carbonate, comprising arranging the iron (ii) sulfate hepta-hydrate, metal oxide/carbonate and a non-interferring medium such as herein described in a closed vessel in a manner that the bottom layer consists of the iron (ii) sulfate heptahydrate which is separated from the top layer of metal oxide/carbonate, by the non-interferring medium, heating the vessel at a temperature of 800°—1000°C, cooling the vessel, removing the top layer and treating with stoichiometric amount of sulfuric acid to form the metallic sulfate and removing the bottom layer containing the red iron oxide.

Provisional specifications 6 pages.

Complete specifications 11 pages.

CLASS : 172 D, [XX]

159187

Int. Cl. : D 01 h, 5/10 5/50.

A TENSION ASSEMBLY FOR WINDERS.

Applicants : SAURABH NATVERLAL KINARIWALA, OF S-466, GREATER KAILASH, PART-1, NEW DELHI-110048, INDIA, AN INDIAN NATIONAL.

Inventors : IDEM.

Application for Patent No. 154/Del/1983 filed on 10th March, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

5 Claims

A tension assembly for use with a winder such as cone or pirn comprising a housing (1) having at least one rotatable member to define a path for the traverse of the yarn, a shaft (2) pivotally secured to said housing a lever (3) supported on one end (2a) of said shaft, said lever supporting a resilient means (5) for applying pressure to said rotatable member, pressure means provided at the opposite end of said shaft characterized in that said pressure means comprises a casing (10) secured to said housing (1), a pin (12) displaceably secured within said casing and having a terminating end (12a) extending outwardly of said casing and adapted to rest on said opposite side (2b) of said pivotal shaft (2), and an actuator for displacing said pin.

Compl. Specn. 7 pages.

Drg. 1 sheet

CLASS : 39 C

159188

Int. Cl. : C 01 c—1/08.

PROCESS FOR THE PRODUCTION OF AMMONIA.

Applicant : IMPERIAL CHEMICAL INDUSTRIES PLC, OF IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON SW1P 3JF, ENGLAND, A BRITISH COMPANY.

Inventor : ALWYN PINTO.

Application for Patent No. 218/Del/1983 filed on 5th April, 1983.

Convention dated 14-4-1982/8201834 & 8210835/(U.K.)

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

5 Claims

(a) A process for the production of ammonia which comprises primary catalytically reforming a hydrocarbon feedstock with steam at superatmospheric pressure and in conditions of steam-to-carbon ratio, pressure and temperature to produce a gas containing carbon oxides, hydrogen and at least 10% v/v of methane on a dry basis;

(b) secondary catalytically reforming the gas from step (a) by introducing air and bringing the mixture towards equilibrium, whereby to produce a gas containing nitrogen, carbon oxides, hydrogen and a decreased quantity of methane, the quantity of air used being in excess of what would introduce 1 molecule of nitrogen per 3 molecules of hydrogen;

(c) converting carbon monoxide catalytically with steam to carbon dioxide and hydrogen;

(d) removing carbon oxides to give fresh nitrogen-hydrogen ammonia synthesis gas;

(e) reacting the synthesis gas to produce ammonia and recovering from the reacted gas; and

(f) treating synthesis gas after reaction to synthesise ammonia to separate a stream enriched in hydrogen, returning the enriched stream to the synthesis and purging the residual stream after separation of the stream enriched in hydrogen :

and is characterised by

X. controlling the rate of flow of the stream enriched in hydrogen so that the hydrogen to nitrogen molar ratio of the gas entering the synthesis catalyst is in the range 1.0 to 2.5; and

Y. carrying out step (a) in an externally heated catalyst and operating step (b) to give an outlet methane content such that in step (f) the purged residual stream contains methane amounting to 5-15% by carbon atoms of the hydrocarbon fed to step (a).

Compl. specn. 24 pages.

Drg. 2 sheets

PRINTED SPECIFICATION PUBLISHED

(1)

A limited number of printed copies of the undernoted specifications are available for sale from the Patent Office, Calcutta and its branches at Bombay, Madras and New Delhi at two rupees per copy :—

143048	143295	143318	143330	143347	143371	143383
143396	143408	143410	143419	143431	143433	143453
143458	143505	143509	143516	143523	143527	143547
143556	143562	143563	143569	143570	143571	143579
143580	143582	143588	143589	143590	143591	143593
143594	143595	143599	143600	143603	143605	143610
143615						

								(13)							
143670	143680	143691	143697	143708	143733	143786		158448	158449	158451	158452	158453	158454	158455	
143809	143812	143816	143819	143843	143851	143864		158456	158457	158459	158460	158464	158466	158467	
143866	143871	143903	143905	143909	143912	143928		158469	158470	158472	158473	158477	158478	158479	
143937	143940	143941	143947	143952	143960	143962		158480	158481	158482	158483	158485	158486	158487	
143990	143991	143995	144006	144009	144014	144015		158488	158489	158490.					
144017	144023	144030.													
								(13)							
152956	152957	152958	152959	152960	152961	152962									
152963	152964	152965	152966	152967	152968	152969		158493	158494	158495	158496	158497	158499	158500	
152970	152971	152972	152973	152974	152975	152976		158507	158508	158509	158511	158512	158513	158515	
								158516	158517	158518	158519	158520.			
								(14)							
								158522	158523	158524	158525	158526	158527	158529	
								158530	158531	158532	158533	158534	158535	158536	
								158537	158538	158539	158540	158541	158542	158543	
								158544	158545	158546	158547	158548	158549	158550	
								158551	158552	158553	158554	158556	158557	158558	
								158560.							
								(15)							
								158522	158523	158524	158525	158526	158527	158529	
								158530	158531	158532	158533	158534	158535	158536	
								158537	158538	158539	158540	158541	158542	158543	
								158544	158545	158546	158547	158548	158549	158550	
								158551	158552	158553	158554	158556	158557	158558	
								158560.							
								(16)							
								158561	158562	158564	158565	158567	158568	158569	
								158570	158571	158572	158573	158576	158577	158579	
								158580	158581	158582	158583	158584	158586	158587	
								158588.							
								(17)							
								158592	158593	158594	158595	158596	158597	158598	
								158599	158600	158601	158602	158604	158605	158606	
								158607	158608	158609	158610	158611	158612	158613.	
								(18)							
								158614	158615	158616	158617	158618	158619	158620	
								158621	158623	158624	158626	158627	158628	158630	
								158631	158632	158634	158635	158636	158637	158638	
								158639	158640	158641	158642	158643	158645	158646	
								158647	158648	158649	158650	158651	158652	158653	
								158654	158655	158656	158657	158658	158659	158660	
								158661	158662	158663	158664	158665	158666	158667	
								158668	158669	158670	158671	158672	158673	158674	
								158675	158679	158676	158680	158681	158682	158683	
								158684	158685	158686	158687	158688	158689	158690	
								158691	158692	158692	158693	158694	158695	158697	
								158698.							
								PATENTS SEALED							
								148348	156401	156555	156625	156692	156694	156721	
								156733	156753	156864	156889	156890	156942	156943	
								157047	157055	157056	157057	157058	157062	157063	
								157064	157069	157074	157077	157097	157109	157112	
								157117	157118	157124	157125	157127	157130	157131	
								157132	157353	157377	157382	157383	157439	157440	

COMMERCIAL WORKING OF THE PATENTED INVENTION

The following Patents in the field of Chemical Engineering Industry are not being commercially worked in India as admitted by the Patentees in the statements filed by them under section 146(2) of the Patents Act, 1970, in respect of calendar year 1984 & 1985 generally on account of want of requests for licences to work the Patented inventions. Persons who are interested to work the said Patents commercially may contact the Patents for the grant of licences for the purpose.

Patent No.	Date of Patent	Name and Address of the Patentees	Title of the Invention
1	2	3	4
143818	12-5-1976	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, Raft Marg, New Delhi-1, INDIA	A process for preparing a new fire extinguishing material for extinction of fires in flammable liquids.
145794	9-11-1976	Do.	Improvements in the process for the production of wet heat resistant chrome leather.
146632	3-11-1977	Do.	A process for preparation of territory alkyl esters from the corresponding halides.
148400	24-2-1978	Do.	A process for preparation of a blasting agent composition for mining tunneling and other excavation work.
148641	15-3-1978	Do.	A process for dealing of crude micro crystalline wax.
148643	18-3-1978	Do.	A process for the re-refining of used lubricating motor oils by simultaneous solvent extraction of the oils and precipitation of the sludge.
146260	9-1-1978	STAMICARBON B. V. P. O. Box 10, Gleem, The Netherlands.	Preparation of melamine from urea.
146802	14-12-1977	HERCULES INCORPORATED, Wilmington, Delaware 19899, U.S.A.	Process for recovering oil from subterranean formation (Docket 761000-A-Ind.)
147648	15-6-1978	SOLVAY & CIE, 33, Rue Du Prince Albert B/1050, Brussels, Belgium.	Process for the preparation of aqueous suspensions containing at least 65% by weight of calcium carbonate.
148102	6-2-1978	SOCIETE NATIONALE DES POUDRE SET EXPLOSIFS, 12, Quai Henri IV, 75181 Paris, Cedex 04, France.	Ternary explosive composition and an explosive charge containing the same.
148326	2-2-1978	CLUETTE, DEABODY & CO., INC. 433, River Street, Troy.	An improved thermally economic process for the recovery of ammonia from a fabric web treated with liquid ammonia.
148352	9-12-1977	CREUSOT-LOIRE, 42, Rue D' Anju, 75008, Paris, France.	Method for the refining of liquid metals for the production of metals or metal alloys and tuyers for use in carrying out such method.
148664	26-6-1978	EXXON RESEARCH & ENGINEERING, Compnay, Florham Park, New Jersey, U.S.A.	Lubricating oil composition and a process for preparing the same.
148695	6-3-1978	SOCIETE NATIONALE DES POUDRES ET EXPLOSIFS, 12, Quai Henri IV, Cedex 04, 75181 Paris, France.	Process & apparatus for the continuous nitration of cellulose using a nitrating liquor comprising nitric acid, sulphuric Acid & water.
148828	3-10-1978	PFIZER CORPORATION, 235, East 42nd Street, New York, State of New York, U.S.A.	A process for preparing 4-amino-2-(piperazine-1-yl) or homopiperazin, 1-yl) Quinazoline.
148881	28-9-1978	Q CORPORATION, 755, West Big Beaver Road, Suite 1610, Troy, Michigan, U.S.A.	Process for producing substantially non-polluting fuel products.
149321	17-10-1978	FAGERSTA AKTIEBOLAG, Fack 5-77301, Fagersta, Sweden.	A method for manufacturing a low alloy high-speed steel.
149383	3-10-1977	DONALD WESTON BOLME, 5916 123 red Avenue, South East Bellevue State of Washington-98006. (U.S.A.)	A process for the removal of nitrogen oxides from industrial gases by use of oxidising solutions in which nitrates are the oxidants.

1	2	3	4
149470	30-6-1978	AKSJESELSKAPET NORCEM, Haakon VII's Gate 2,0510 1, Norway.	Process for manufacturing concrete of high corrosion resistance.
150163	28-9-1978	CHMIE LINZ AKTIENGESELLSCHAFT St. Peter strass 25, 4020 Linz, Austria.	Process for the preparation of anhydrous aluminium fluoride.
150271	21-9-1978	WILLIAM VINCENT YOUDELTS, 1935 West Grand, Boulevard, Windsor, Ontario, Canada.	Process for the preparation of a base alloy of silver copper-Germanium.
150282	30-11-1978	ISHIKAWAJIMA HARIMA JUKOGYO KABUSHIKI KAISHA, No. 2-1, 2-Chome-Machi, Chiyoda-ku, Tokyo-to Japan.	A floating layer type reduction process for iron ores.
150288	21-9-1978	WILLIAM VINCENT YOUDELIS, 1935 West Grand, Boulevard, Windsor, Ontario, Canada.	Process for the preparation of an alloy of Silver, Copper, germanium and tin.
150337	9-11-1978	SOCIETE DE CONSELLS DE RECHERCHES ET D' APPLICATIONS (SCARS) 264, Rue du Faubourg St. Honore-75008, Paris, France.	Process for the preparation of a new pyridine derivative.
150395	20-11-1978	PFIZER INC. 235 East 42nd Street, New York, State of New York, U.S.A.	Process for preparing 4"-deoxy-4"-acetylido derivatives of 'oleandomycin' erythromycin carbonate & Pharmaceutically acceptable salts thereof.
150407	20-11-1978	Do.	Process for preparing 4"-deoxy-4"-acetylido derivatives erythromycylamine.
150723	16-1-1979	TOYO ENGINEERING CORPORATION 55, 2-Ban, 3-Chome, Kasumigaseki, Chiyoda-ku, Tokyo, Japan.	Process, for preparation of gases from heavy oils.
150734	16-8-1978	SAINI-GOBAIN INDUSTRIES, 62, Boulevard Victor Hugo, Neuilly-Sur-Seine France.	Improvements in the process for the manufacture of fibres from an attenuable material & apparatus for the manufacture of fibres from an attenuable material by said process.
151034	10-1-1979	THE BOARD OF THE RUBBER RESEARCH INSTITUTE OF MALAYSIA, 260, Jalan Ampang, Kuala Lumpur Malaysia.	A method of stabilising field latex against coagulation.
151103	12-4-1979	SYNTHELABO, 1, Avenue de, Villars, 75341, Paris Cedex 07, France.	A process for the extraction of sennosides
151106	8-5-1979	IMITSU TOATSU CHEMICALS, INC., 3-2-5, Kasumigaseki, Chiyoda-ku- Tokyo, Japan.	An improved process for synthesizing urea from ammonia and carbon dioxide with elimination of possible explosion of the tails gas from said process.
151146	24-11-1978	SOCIETE DE CONSELLS DE RECHERCHES ET D' APPLICATIONS SCIENTIFIQUES (SCRAS) 264, Rue du Faubourg, St. Honore, 75008, Paris, France.	Preparation of new indolo (2, 3-a) quinolizidines.
151159	31-10-1979	TOYO ENGINEERING CORPORATION, 5, 2-Banchi, 3-chome, Kasumigaseki, chiyoda-ku, Tokyo, Japan.	Process for preparation of ureas.
151692	23-4-1979	STAMICARBON B. V. Blean, the Netherlands.	Process for the separate recovery of ammonia and carbon dioxide from mixtures containing ammonia, carbon dioxide and water.
151973	21-5-1979	EXPANSIA, 264, rue du Faubourg, St. Honore 75008, Paris, France.	Improved process for the preparation of 2-isopropylamino pyrimidine.
152009	12-4-1979	CASTROL LIMITED, Burman House, Piper's way, Swindon, Wiltshire SN3 1 RE- ENGLAND.	A hydraulic system containing a hydraulic fluid having a boron-silicon compound.
152304	6-6-1979	UNION CARBIDE CORPORATION, 270, Park Avenue, New York, State of New York 10017, U.S.A.	Rapid adiabatic pressure swing process for the separation of a multi component feed gass.
152316	6-6-1979	Do.	Process and apparatus for the rapid pressure swing adsorption separation of oxygen from air.
152389	20-6-1979	ICI AUSTRALIA LTD., 1, Nicholson St., Melbourne, Victoria 3001, Australia.	An improved process for the manufacture of ammonium nitrate prilles of granules.
152539	6-7-1979	CELAMERCK GmbH & Co. Kg D 6507, Ingelheim an Rhein, Germany.	A process for the preparation of 2-chloro-6-nitro aniline derivatives.

Chemical Engineering List No. II

COMMERCIAL WORKING OF THE PATENTED INVENTION

The following patents in the field of Mechanical and General Engineering Industry are not being commercially worked in India as admitted by the Patentees in the statements filed by them under section 146(2) of the Patents Act, 1970, in respect of calendar year 1984 and 1985 generally on account of want of requests for licences to work the Patented inventions. Persons who are interested to work the said Patents commercially may contact the Patentees for the grant of licence for the purpose.

Patent No.	Date of Patent	Name & Address of the Patentees	Title of the Invention
1	2	3	4
142182	1-5-1974	COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, Rafi Marg, New Delhi-1. (India).	Submerged Burner.
146542	21-7-1977	Do.	An automatic mechanical profile recording device particularly suited for road unevenness tester and similar Devices.
148476	7-10-1978	Do.	Dust collection device.
150486	18-3-1980	Do.	The continuous process for surface graining of aluminium foil for aluminium off set lithographic plates used in duplicating machines.
150817	18-1-1979	Do.	A retrievable foundation.
151083	14-9-1979	Do.	An adaptive compensator device to reduce automatically background signal induced gain variations in photo detectors output signals.
151381	20-10-1978	Do.	An improved table press Machine for the manufacture of sand-lime bricks.
140115	31-12-1974	MARC YVES VERGNET, 1, Chemin du Val Doux, La Pareigne Toulon Car, France.	Improvements in or relating to pumps.
140646	17-7-1973	FRITZ STAHLCKER, JOSEF Neidhartstrasse 18, D-7341, Bad- Überkingen, West Germany.	Apparatus for removing impurities.
145700	10-8-1976	MONOVIS B. V. Keizersgracht 253, Amsterdam. The Netherlands.	Fluid working machine having a rotatable screw.
147918	16-3-1978	UNION CARBIDE CORPORATION, 270, Park Avenue, New York, State of New York 10017, U.S.A.	An improved gas liquid contracting tray.
148734	13-4-1978	QUIGLEY COMPANY, INC. 235 East, 42nd Street, New York, State of New York, U.S.A.	Method of prolonging durable life of AOD furnace refractory linings.
149290	9-7-1980	CEMINDIA COMPANY LIMITED, Steelcrate House, Dinshaw Vachha Road, Bombay-20, Maharashtra (India).	Pile & liner assembly process for the manufacture thereof and method of piling employing such assembly.
150601	22-1-1979	ASEA AKTIEBOLAG, S. 721 83, Västeras, Sweden.	Method of splicing a cable with an insulation of cross-linked polyethylene or another cross-linked polymer.
150679	25-1-1979	HYDRA-TIGHT LIMITED, Argyle House, Bentley Mill close, Walsall, West Midlands WS-2, CBN, England.	Device for use in tightening nuts.
150815	16-1-1979	LETTERA ARABICA S. a.r.l., Inmucible Sohat, Route International-de Damas Hazmieh Liban, B. P. 11, 2706 Beirut, Lebanon.	Apparatus for the composition of texts in arabic characters.
151104	1-8-1980	RAVINDER SINGH, Y-77, Hauz Khas, New Delhi-110 016.	Improved storage container for liquid gas.
151620	15-5-1980	Do.	Improvements in or relating to an air cooler.
151621	15-5-1980	Do.	An air cooler.
151689	11-4-1980	Do.	A rotary irrigation sprinkle.
151699	15-5-1980	Do.	An air cooler.
152054	9-4-1979	SHERRITT GORDON MINES LTD., 2800 Commerce Court West, Toronto, Ontario, Canada.	Blank suitable for minting into a coin or similarly disc shaped articles and method for producing the same.

1	2	3	4
152178	21-3-1979	PFIZER CORPORATION, 235 East 42nd St., New York, State of New York, U.S.A.	Process for producing a device for the controlled and continuous administration of chemical to an aqueous liquid containing environment.
152237	30-5-1979	USS ENGINEERING AND CONSULTANTS INC., 600 Grant Street, Pittsburgh, State of Pennsylvania, U.S.A.	A removable plate assembly for use in a rotary gate valve for teeming molten metal.
152385	14-6-1979	AMFU LIMITED, 20, St. Mary's Parsonage, Manchester M3 1 NL England.	A fibrous board.
152417	21-6-1979	SOUTHWIRE COMPANY, 126 Fortilla Street, Carrollton, Georgia 30117, U.S.A.	Continuous copper melting furnace.
152719	24-7-1979	G. D. SOCIETA PER AZIONI, Via Pomponia 10, Bologna, Italy.	Variable capacity reservoir for bar shaped elements particularly cigarettes.
148738	11-8-1977	DART INDUSTRIES, 8480 Beverly Boulevard, Los Angeles, California 90048, U.S.A.	A process for producing a decorative laminate.

RENEWAL FEES PAID

148483 138489 139158 140118 140256 141130 141319
 142099 142380 143350 143570 143709 144168 144200
 144267 144414 144739 144844 144902 144945 145064
 145278 145354 145608 145756 145808 145816 145820
 145890 146382 146503 146521 146778 146968 146969
 147116 147198 147442 147569 147874 147889 147912
 148390 148474 148478 148590 148740 148862 149011
 149072 149276 149289 149672 150389 150639 150860
 150865 150967 150999 151049 151050 151131 151169
 151256 151284 151406 151428 151516 151582 151605
 151613 151834 151957 152124 152208 152367 152406
 152668 152756 152884 152985 153018 153065 153214
 153347 153602 154037 154050 154107 154108 154109
 154154 154203 154204 154205 154254 154456 154528
 154583 154655 154656 154657 154662 154681 154822
 154892 154994 155053 155103 155227 155347 155396
 155508 155509 155533 155607 155796 155853 155904
 155911 155992 155993 155994 155995 156007 156010
 156012 156013 156015 156021 156042 156044 156045
 156046 156059 156062 156063 156077 156078 156079
 156080 156084 156093 156094 156096 156098 156100
 156102 156106 156108 156114 156138 156139 156140
 156149 156182 156183 156184 156202 156219 156250
 156251 156252 156253 156256 156257 156275 156276
 156280 156282 156284 156287 156288 156293 156295
 156296 156299 156304 156488 156489 156494 156509
 156604 156698 156934 157103.

CESSATION OF PATENTS

150456 151228 153498 155282.

RESTORATION PROCEEDINGS

(1)

Notice is hereby given that an application for restoration of Patent No. 147566 dated the 31st March, 1978 made by Balasubramaniam Vijayalakshmi on the 20th February, 1986 and notified in the Gazette of India, Part-III, Section 2 dated the 19th July, 1986 has been allowed and the said patent restored.

(2)

Notice is hereby given that an application for restoration of Patent No. 153819 dated the 12th May, 1980 made by Arthur Conard Barnes & Carl Edmund Barnes on the 13th May, 1986 and notified in the Gazette of India, Part-III, Section 2 dated the 27th September, 1986 has been allowed and the said patent restored.

(3)

Notice is hereby given that an application for restoration of Patent No. 153820 dated the 22nd September, 1980 made by Arthur Conard Barnes & Carl Edmund Barnes on the 13th May, 1986 and notified in the Gazette of India, Part-III, Section 2 dated the 27th September, 1986 has been allowed and the said patent restored.

(4)

Notice is hereby given that an application for restoration of Patent No. 153860 dated the 12th March, 1980 made by Arthur Conard Barnes & Carl Edmund Barnes on the 13th May, 1986 and notified in the Gazette of India, Part-III, Section 2 dated the 27th September, 1986 has been allowed and the said patent restored.

(5)

Notice is hereby given that an application for restoration of Patent No. 154075 dated the 10th April, 1980 made by Hindustan Insecticides Ltd. on the 25th February, 1986 and notified in the Gazette of India, Part-III, Section 2 dated the 2nd August, 1986 has been allowed and the said patent restored.

(6)

Notice is hereby given that an application for restoration of Patent No. 154569 dated the 8th September, 1980 made by Arthur Conard Barnes & Carl Edmund Barnes on the 13th May, 1986 and notified in the Gazette of India, Part-III, Section 2 dated the 27th September, 1986 has been allowed and the said patent restored.

REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry.

Class 1. No. 157378. Maya Panchal Industries, 216, Falkland Road, Sanghvi Godown, Khetwadi 10th Lane, Bombay-400 004, Maharashtra, India, an Indian Partnership Firm. "Milk Boiler". 26th August, 1986.

Class 1. No. 157408. Larsen & Toubro Limited, of L & T House, Ballard Estate, Bombay-400038, Maharashtra, India, an Indian Company, an "Electric Switch". 3rd September, 1986.

Class 1. No. 157515. Shourie Copieurs Copieurs Limited, 2A DLF Industrial Area, Shivaji Marg, New Delhi-110015, India, an Indian Company. "Binding Machines". 8th October, 1986.

Class 1. No. 157533. Ankit Industries, Kevadawadi Street No. 1 Corner, Behind Bombay Iron Works, Rajkot-360002, Gujarat State, India, an Indian Partnership Firm. "Electronic Gas Lighter". 9th October, 1986.

Class 3. Nos. 157278, 157279. Crystal Plastics & Metallizing Private Limited, Sanghi House, Palkhi Galli, Off Veer Savarkar Marg, Prabhadevi, Bombay-400 025, Maharashtra, India, a private limited company incorporated under the Indian Companies Act. "Comb". 22nd July, 1986.

Class 3. No. 157305. Samsonite Corporation, a corporation organized under the laws of the State of Colorado, U.S.A., of 11200 East 45th Avenue, Denver, Colorado 80239, U.S.A. "Combination Garment Bag and Packing Case Luggage Piece". 31st July, 1986.

Class 3. No. 157379. The Jay Hind Oil Mills Co., 153, Lal Bahadur Shastri Marg, Bhandup, Bombay-400 078, Maharashtra, India, an Indian Partnership Firm. "Bottle". 26th August, 1986.

Class 3. No. 157385. Milton Plastics, a registered Indian Partnership Firm, registered under the Indian Partnership Act, 1932, having Office at 202/203, 'Rahja Centre', 214, Nariman Point, Bombay-400 021, Maharashtra, India. "Tray Set". 28th August, 1986.

Class 3. No. 157406. Georg Fischer Aktiengesellschaft, CH-8201, Schaffhausen Switzerland, a Company organized and existing under the laws of Switzerland. "Ball Cocks". 2nd September, 1986.

Class 3. No. 157409. Larsen & Toubro Limited, of L & T House, Ballard Estate, Bombay-400038, Maharashtra, India, an Indian Company, an "Electric Switch". 3rd September, 1986.

Class 3. 157450. S. P. Industries, 12 Ganesh Chandra Avenue, Calcutta-700013, West Bengal, India, an Indian Registered Partnership Firm. "Ball Pen". 19th September, 1986.

Class 3. Nos. 157521, 157522. S. P. Industries, 12 Ganesh Chandra Avenue, Calcutta-700013, West Bengal, India, an Indian Partnership Firm. "Ball Point Pen". 9th October, 1986.

Class 3. No. 157550. Byrne & Davidson Doors (N.S.W.) PTY, Ltd., a Company incorporated under the laws of the State of New South Wales, Commonwealth of Australia, of 34-36 Marigold Street, Revesby, New South Wales, 2212, Australia, a "Remote Control Unit". Reciprocity date is 15th April, 1986. (Australia).

Class 3. No. 157551. Byrne & Davidson Doors (N.S.W.) PTY, Limited, a Company incorporated under laws of the State of New South Wales, Commonwealth of Australia, of 34-36 Marigold Street, Revesby, New South Wales, 2212, Australia, a "Control Unit". Reciprocity 15th April, 1986. (Australia).

Class 4. No. 157418. Maci-Marketing Centre International Corp., a corporation organised under the Laws of Panama, C/o, Morgan Y Morgan, Edificio Public, Via Espana and Calle, Colombia, Panama, a "Bottle". 5th September, 1986.

Class 5. Nos. 157372, 157373. Wagheshwari Industries, Near Dena Bank, Bhayandar, Distt. Thane, State of Maharashtra, India, an Indian Sole Proprietary Firm. "Packing Carton". 26th August, 1986.

Extn. of Copyright for the Second period of five years.

No. 156404, Class 1.

Nos. 151033, 155167, 155168, 155243, 155137, 155403, 155404, 151240, 151297, 151277, 151278, 151279, 151275, 151032, 156864, 156733, 156131, 156730, 156911, 156900, 157107. Class 3.

Nos. 151241, 156073. Class 4.

Nos. 151092, 156851, 157104. Class 5.

Extn. of Copyright for the Third period of five years.

No. 156404. Class 1.

Nos. 155167, 155168, 155243, 155137, 155403, 155404, 151297, 151032, 156864, 156733, 156131, 156730, 156911, 156909, 157107. Class 3.

No. 156073. Class 4.

Nos. 151092, 156861, 157104. Class 5.

Name Index for the applicant of Patent for the month of June, 1986 (Nos. 406/Cal/86 to 488/Cal/86, 430/Mas/86 to 499/Mas/86, 481/Del/86 to 573/Del/86 and 162/Bom/86 to 179/Bom/86).

Name	Appln. No.
A	
Actief N. V.—463/Mas/86.	
Acumeter Laboratories, Inc.—481/Del/86.	
Aggarwal, B. K.—531/Del/86.	
Alcatel.—536/Del/86.	
Ambuvani, R. B.—179/Bom/86.	
Amoco Corporation.—497/Del/86.	
ANDARALO, M. M.—509/Del/86.	
Angelo II, J. F. (Frank).—406/Cal/86.	
Anicon, Inc.—498/Mas/86.	
Arjomari-prioux.—535/Del/86.	
Associated Cement Companies Limited, The.—165/Bom/86, 166/Bom/86.	
Athwal, I. S.—560/Del/86.	
Azad, A.—483/Mas/86, 484/Mas/86.	

Name	Appn. No.	Name	Appn. No.
B			
B. F. Goodrich Company, The.—483/Del/86.		Dow Chemical Company, The.—442/Mas/86.	
B P Chemicals Limited.—500/Del/86, 545/Del/86.		Druzhinin, E. A.—509/Del/86.	
B. W. N. Vortoil Rights, Co., Pty Ltd.—451/Cal/86.		Ducellier Et Cie.—565/Del/86.	
Babcock & Wilcox Company, The.—432/Cal/86.		Dutta, D.—422/Cal/86.	
Bagnis, A.C.—512/Del/86.		Dynamit Nobel Ag.—472/Mas/86.	
Bagnis, L.C.—512/Del/86.		E	
Banka, T. C.—412/Cal/86, 444/Cal/86.		Elkem.—468/Mas/86.	
Bar Ilan University.—460/Cal/86.		Enichem Elastomeri SpA.—440/Mas/86.	
Beloit Corporation.—445/Cal/86.		Enichem Elastomeri SpA.—470/Mas/86.	
Bengal Lamps Limited.—469/Cal/86.		Environmental Elements Corporation.—419/Cal/86, 420/Cal/86.	
Bhambri, G. P.—525/Del/86.		Experimentalny zavod dickhimicheskikh Preparatov Instituta Mikrobiologii Imeni Avgusta Kirkhenshtaina Akademii Nauk Latviiiskoi SSR.—427/Cal/86.	
Biogal Gyogyszergyar.—416/Cal/86.		Exxon Chemical Patents Inc.—539/Del/86.	
Board of Trustees of University of Illinois.—432/Mas/86.		F	
Borodulin, G.—507/Del/86.		F. L. Smidh & Co.—439/Mas/86, 448/Mas/86, 459/Mas/86.	
Branscomb Corporation N. V.—480/Mas/86.		FMC CORPORATION.—541/Del/86.	
Burton (NMI) Axcelrod.—474/Mas/86.		F. S. Smidh & Co.—435/Mas/86.	
Bush India Limited.—169/Bom/86.		Fedotov, V. E.—459/Cal/86.	
Bussemachukas, V. B.—509/Del/86.		Forberg, H.—483/Cal/86, 486/Cal/86.	
I		Forsac Valves Limited.—438/Mas/86.	
C		Fosroc International Limited.—564/Del/86.	
CEE Corporation.—409/Cal/86.		Fried Krupp Gesellschaft Mit Bescharankter Haftung.—431/Cal/86.	
Carrington Laboratories, Inc.—484/Cal/86.		G	
Caterpillar Inc.—441/Mas/86.		Gen Corp. Inc.—555/Del/86.	
Centro Sperimentale Metallurgico SpA.—418/Cal/86.		General Foods Corporation.—550/Del/86.	
Cetus Corporation.—464/Cal/86.		General Mining Union Corporation Limited.—434/Cal/86, 435/Cal/86.	
Chacko, T.—477/Mas/86.		General Signal Corporation.—528/Del/86.	
Chakraborty U. R.—411/Cal/86.		Georg Fischer Aktiengesellschaft.—436/Cal/86.	
Champion Spark Plug Europe S. A.—534/Del/86.		Ghosh, A.—456/Cal/86.	
Charbonnages De France (Etablissement public).—450/Mas/86.		Goel, N. K.—559/Del/86.	
Chaudhary, A. K.—523/Del/86.		Goodman, G.—464/Mas/86.	
Chernovisov, G. N.—459/Cal/86.		Goodyear Tire & Rubber Company, The.—568/Del/86.	
Chevron Research Company.—471/Mas/86.		Gopichand, K. (Dr.).—446/Mas/86.	
COFLEXIP.—469/Mas/86.		Gupta A. K.—482/Del/86.	
Colgate Palmolive Company.—484/Del/86.		Gupta C. P.—559/Del/86.	
Contempo Products.—521/Del/86.		Gupta, J.—551/Del/86.	
Continental Technology Corporation.—464/Mas/86.		Gupta, M. M. L.—499/Del/86.	
Cooper Industries, Inc.—434/Mas/86.		H	
Corning Glass Works.—489/Mas/86.		Han-MiPharma Ind. Co. Ltd.—508/Del/86.	
Council of Scientific and Industrial Research.—486/Del/86, 498/Del/86, 514/Del/86, 515/Del/86, 516/Del/86, 517/Del/86, 529/Del/86, 530/Del/86, 532/Del/86, 569/Del/86, 570/Del/86, 571/Del/86, 572/Del/86, 573/Del/86.		Harne, V. K. G.—162/Bom/86.	
Crompton Greaves Limited.—171/Bom/86.		Henkel Kommanditgesellschaft auf Aktien.—493/Mas/86.	
D		Herrli, P.—521/Del/86.	
Daiichi Seiyaku Co., Ltd.—573/Mas/86.		Hindustan Lever Limited.—175/Bom/86, 176/Bom/86, 177/Bom/86, 178/Bom/86.	
De La Rue Giori S.A.—513/Del/86.		Hitachi, Ltd.—417/Cal/86, 449/Cal/86.	
Deodhar, S. J.—433/Cal/86.			
DERDALL G. B.—511/Del/86.			
Desai, P. W.—164/Bom/86.			
Douez, F.—522/Del/86.			

Name	Appln. No.
Hoechst Aktiengesellschaft.—488/Cal/86.	
Hoechst Aktiengesellschaft.—497/Mas/86.	
Hoesch Maschinenfabrik Deutschland AG.—472/Cal/86.	
Hokutsu Industries Co, Ltd.—474/Cal/86.	
Hovione Inter Ltd.—554/Del/86.	

I

Idemitsu Kosan Co, Ltd.—455/Cal/86.	
Imperial Chemical Industries PLC.—487/Del/86, 491/Del/86, 520/Del/86.	
Ingeniorforretningen Atlas A/S.—476/Mas/86.	
Institut Francais Du Petrole.—469/Mas/86.	
Institut Gornogo Dela Sibirskogo Otdelenia Akademii Nauk SSSR.—439/Cal/86.	
Institut Khimicheskikh Nauk Akademii Nauk Kazakhskoi SSR.—458/Cal/86.	
International Business Machines Corporation.—491/Mas/86.	
Iysammal, T. M. A.—483/Mas/86, 484/Mas/86.	

J

Jacobsen, A. N.—501/Del/86.	
Japan Pipe Conveyor Co, Ltd.—455/Cal/86.	
Jhonson & Jhonson Products, Inc.—443/Cal/86.	
Johnson Matthey Public Limited Company.—526/Del/86.	
Joseph, N. J.—478/Mas/86.	
Joshl, N. R.—173/Bom/86, 174/Bom/86.	

K

Kader, A. A.—483/Mas/86, 484/Mas/86.	
Kafley, O.—428/Cal/86.	
Kansas State University Research Foundation.—449/Mas/86.	
Keewest Developments Limited.—533/Del/86.	
Kerr-MGee Chemical Corporation.—563/Del/86.	
Koppers Company, Inc.—415/Cal/86.	
Kraftwerk Union Aktiengesellschaft.—466/Cal/86, 467/Cal/86.	
Krone—GmbH.—447/Cal/86.	
Krug, H.—461/Cal/86.	
Krupp-Polysius AG.—558/Del/86	
KUBASOV, V. L.—509/Del/86.	
Kumar, P.—504/Del/86.	
Kumar, P. R.—475/Mas/86.	
Kurganov, V. M.—459/Cal/86.	

L

Linde Aktiengesellschaft.—490/Mas/86.	
Linemann-Halflo Limited.—502/Del/86.	
Lucas Industries Public Limited Company.—496/Mas/86.	
Lvovich, F. I.—509/Del/86.	

M

M & T Chemicals Inc.—562/Del/86.	
Magnetics Research International Corporation.—448/Cal/86.	
Maschinenfabrik Wifag.—561/Del/86.	
Mc Dermott International, Inc.—437/Cal/86.	

Name	Appln. No.
McPherson's Limited.—462/Mas/86.	
Mechanikai Muvek.—488/Del/86.	
Melero, P. V.—438/Cal/86.	
Merck Patent Gesellschaft Mit Beschränkter Haftung.—473/Cal/86.	
Metal Box Public Limited Company.—458/Mas/86.	
Metallurgical & Engineering Consultants (India) Limited.—423/Cal/86, 462/Cal/86.	
Michelin & CIE. (Compagnie-Générale des Établissements Michelin).—461/Mas/86.	
Mipak Plastics (Pvt) Limited.—163/Bom/86.	
Mitsubishi Denki Kabushiki Kaisha.—431/Mas/86, 455/Mas/86, 457/Mas/86.	
Mitsubishi Rayon Co, Ltd.—454/Cal/86.	
Moore Products Co.—466/Mas/86.	
Multi-Arc Vacuum Systems Inc.—471/Cal/86.	

N

NIIMSK-Nauchno-Issledovatel'kiy Institut Monomerov Dlia Sinteticheskogo Kauchuka.—453/Mas/86.	
NL Industries, Inc.—470/Cal/86.	
NRM Corporation.—519/Del/86.	
N. V. Philip's Gloeilampenfabrieken.—450/Cal/86.	
Nauchno-Issledovatel'sky Institut Po Udobreniyam I Insektofunktsiyam Imeni Professora Ya V Samailova Nauchno-Proizvodstvennogo Obiedinenia "Minudobrenia".—458/Cal/86.	
National Remote Sensing Agency.—443/Mas/86, 444/Mas/86, 445/Mas/86.	
Nayak, U. V.—479/Mas/86, 488/Mas/86.	
Neste OY.—429/Cal/86.	
Newell, T. J.—487/Cal/86.	
Nippon Kokan Kabushiki Kaisha.—437/Mas/86.	
Nitto Chemical Industry Co, Ltd.—454/Cal/86.	

O

Officine Roncaglia S.p.A.—407/Cal/86.	
Okazaki, H.—455/Cal/86.	
Owens Illinois, Inc.—430/Mas/86.	

P

PPG Industries, Inc.—506/Del/86.	
Paikhawala, J. P.—170/Mas/86.	
Palmer, J. M.—452/Mas/86.	
Patankar, V. K.—168/Bom/86.	
Parick, A.—467/Mas/86.	
PAUL, D.—523/Del/86.	
Persidsky, M.—507/Del/86.	
Phillips Petroleum Company.—457/Cal/86.	
Piaggio & C.S.p.A.—492/Del/86.	
Politechnika Slaskaim.—486/Mas/86.	
Propane Carburetion Systems, Inc.—410/Cal/86.	
Protec A/S.—465/Mas/86.	
Puri, D.—540/Del/86.	

Name	Appln. No.	Name	Appln. No.	
R			T	
Rhone-Poulenc Fibres.—456/Mas/86.		Tashkentskoe Spetsial'noe Konstruktorskoe Bjuro Textilnykh Mashin.—463/Cal/86.		
Richter Gedeon Vegyeszeti Gyar RT.—430/Cal/86.		Tata Energy Research Institute, The.—542/Cal/86.		
Royal Ordnance PLC.—538/Cal/86.		Terekhov, N.I.—459/Cal/86.		
Ryzhkov, N. V.—459/Cal/86.		Texaco Development Corporation.—468/Cal/86.		
S				
Sanden Corporation.—489/Cal/86.		Thangaraj, K.—436/Mas/86.		
Sanden Corporation.—566/Cal/86.		Thiokol Corporation.—567/Cal/86.		
Sansho Seiyaku Co. Ltd.—440/Cal/86.		Thomas, K. T.—495/Mas/86.		
Schonert K.—408/Cal/86.		Tractel Tirfor India Private Limited.—446/Cal/86.		
Seatank International AB.—527/Cal/86.		Trutzschler GmbH & Co, K. G.—421/Cal/86.		
Shell Internationale Research Maatschappij BV.—482/Mas/86, 492/Mas/86, 499/Mas/86.		Tungeram Reszvenytarssag.—441/Cal/86.		
Shell Internationale Research Maatschappij B. V.—490/Cal/86, 557/Cal/86.		U		
Simizu Kentsu Kabushiki Kaisha.—447/Mas/86.		UOP Inc.—493/Cal/86, 503/Cal/86.		
Shkolnik, A.—507/Cal/86.		Uniroyal Chemical Co. Inc.—494/Cal/86, 495/Cal/86.		
Shrivastava, L. M.—172/Bom/86.		V		
Siemens Aktiengesellschaft.—452/Cal/86, 453/Cal/86.		Valeo.—496/Cal/86.		
Singh, H.—523/Cal/86.		Vamatex S.P.A.—433/Mas/86.		
Singh, R. N.—424/Cal/86.		Vapor Corporation.—524/Cal/86.		
Snamprogetti S.p.A.—453/Mas/86.		Vartak, T.P.—167/Bom/86.		
Sociedad Esponela Del Acumulador Tudor.—451/Mas/86.		Vaseiko, A.I.—459/Cal/86.		
Societe Chimique Des Charbonnages S.A.—546/Cal/86, 552/Cal/86.		Vereinigte Edelstahlwerke Aktiengesellschaft (VEW).—505/Cal/86.		
Societe D' Etudes Scientifiques et Industrielles de L'ile-de-France.—487/Mas/86.		Vickers, Incorporated.—425/Cal/86, 426/Cal/86.		
Societe des Produits Nestle S.A.—485/Mas/86.		Vidar-SMS Co. Ltd.—481/Mas/86.		
Soloviev, V. G.—459/Cal/86.		Videocolor.—510/Cal/86, 537/Cal/86.		
South India Textiles Research Association, The.—494/Mas/86.		Voest-Alpine Aktiengesellschaft.—414/Cal/86.		
Standard Oil Company, The.—518/Cal/86, 547/Cal/86, 548/Cal/86, 556/Cal/86.		W		
Stamicarbon B. V.—454/Mas/86.		Westinghouse Electric Corporation.—413/Cal/86, 465/Cal/86, 475/Cal/86, 476/Cal/86, 477/Cal/86, 478/Cal/86, 479/Cal/86, 480/Cal/86, 481/Cal/86, 482/Cal/86.		
Stone & Webster Engineering Corporation.—485/Cal/86.		White Consolidated Industries Inc.—543/Cal/86, 544/Cal/86.		
Sulzer Brothers Ltd.—549/Cal/86.		Willumsen, K. M.—485/Cal/86.		
Surgikos, Inc.—442/Cal/86.		Willumsen, P.—485/Cal/86.		
		Wong, A.—511/De/86.		
		Yim, B. D.—533/Cal/86.		

R. A. ACHARYA
Controller General of Patents,
Designs and Trade Marks